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ABSTRACT

This report presents trends in national and statewide test performance for North Carolina's public school racial/ethnic subgroups. It is intended to help policymakers gauge the progress and status of minority student achievement in the state's public schools; facilitate the comparison of the academic achievement of racial/ethnic students in North Carolina with that of peers nationwide; and apprise the public of the status of academic achievement among the various racial/ethnic subgroups in North Carolina. Section 1 reviews variables contributing to the minority achievement gap that have been reported in the literature. Section 2 highlights minority student performance on various national standards, offering data for comparing minority student achievement in North Carolina with that of peers across the nation. Section 3 summarizes the performances of North Carolina's racial/ethnic groups on state-mandated tests. Section 4 presents various strategies for closing the minority achievement gap. Data in the report reveal some glaring disparities between the academic achievement of white and Asian children and other minority children in North Carolina, suggesting that North Carolina's public education system may not be serving all children equally. (Contains 14 figures, 39 tables, 53 references.) (SM)



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Minority Achievement Report 2001

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Foreword

The improvement of minority achievement and the closing of achievement gaps between minority students and White students are major priorities of the North Carolina General Assembly, the State Board of Education, and the North Carolina Department of Public Instruction. Essential to the closing of such gaps is the disaggregation of data for the various racial/ethnic subgroups in the state. Such data are necessary for identifying and developing high efficacy programs and strategies for closing minority achievement gaps.

This first issue of the Minority Achievement Report: Trends in Subgroup Performance is one of the more recent initiatives of the North Carolina Department of Public Instruction for addressing the minority achievement issue in North Carolina. It provides information that permits educators, policymakers, parents, and the general public to monitor the progress and status of minority education in the state. In addition, the report facilitates the comparison of minority student achievement in North Carolina with that of peers in the nation.

Since 1996-97, the initial year of the ABCs of Public Education, North Carolina has shown overall gains in student achievement on state and national examinations. The various racial/ethnic groups have also improved their performance, perhaps due, in part, to increased focus on accountability.

Educators and policymakers in North Carolina are excited and optimistic about the aggressive initiatives that have been launched in the state for improving minority student achievement. This enthusiasm was especially evident at the 2001 Improving Minority and At-Risk Student Achievement Conference, where over 3000 dedicated professionals met to share best practices.

We look forward to the challenge of accelerating academic performance of all children in North Carolina and eliminating minority student achievement gaps as the state strives to become *First in America*.



Executive Summary

The information reported in this first issue of the *Minority Achievement Report: Trends in SubgroupPerformance* aims to (1) assist policymakers in gauging the progress and status of minority student achievement in North Carolina's public schools, (2) facilitate the comparison of the academic achievement of racial/ethnic students in North Carolina with that of peer groups in the nation, and (3) apprise the public of the status of academic achievement among the various racial/ethnic subgroups in North Carolina. The results from state and national examinations reveal some glaring disparities between the academic achievement of White and Asian children and the academic achievement of other minority children in North Carolina. An overview of such discrepancies is as follows:

National Assessment of Educational Progress (NAEP)

North Carolina's grades 4 and 8 White students scored higher than Black students by 27 and 22 points, respectively, on the 1998 NAEP Reading assessment. In terms of achievement level, 26 percent more grade 4 White students and 27 percent more grade 8 White students scored at or above *Proficient* than their Black counterparts on the 1998 Reading Assessment. The Black-White gaps in Reading scale scores and achievement levels at grade 4 have changed negligibly since the 1992 assessment.

North Carolina's grade 8 White students scored 25 points higher than their Black counterparts on the NAEP Writing assessment in 1998. The percent of grade 8 White students performing at or above *Proficient* exceeded that of Black students by 24 percent in 1998.

On the 1996 NAEP Mathematics assessment, grades 4 and 8 White students in North Carolina scored higher than their Black counterparts by 29 points and 31 points, respectively. The percents at or above *Proficient* were 25 percent and 23 percent higher for White students than Black students at grades 4 and 8, respectively.

Grade 8 White students scored 31 points higher than grade 8 Black students on the 1996 NAEP Science assessment. Twenty-seven percent (27 percent) more grade 8 White students scored at or above *Proficient* in Science than their Black counterparts on the 1996 Science assessment.

Iowa Tests of Basic Skills (ITBS)

On the ITBS Reading Total Skills subtest, the gap between the performance of North Carolina's grade 5 Black and White students decreased by about three points between 1996 and 2000. In Reading Advanced Skills, the Black-White gap for grade 5 students decreased by about five points during that period. All racial/ethnic groups at grade 5 scored higher in Reading Advanced Skills in 2000 than in 1996. In Reading Total Skills, all racial/ethnic groups scored higher in 2000 than in 1996 except White students, who scored about the same both years.

Among grade 8 students, the Black-White Gap in Reading Total Skills was about the same in 1996 and 2000. All racial/ethnic groups scored higher in 2000 than in 1996 except



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Asians who scored nearly 15 points lower.

All of North Carolina's racial/ethnic groups continued to perform poorly in Language Total Skills and Language Advanced Skills in 2000, with no improvement for any of the state's racial/ethnic groups from the previous year. The average gap between the performance of the state's White students and the state's Black students in Language Total and Advanced Skills has been nearly 20 points from 1996 to 2000. The poor performance of North Carolina's students in language skills has been associated with differences in the state's instructional focus and the focus of the ITBS language skills test. Adjustments were made in this regard in the Revised English/Language Arts Standard Course of Study, which was scheduled for implementation in 2001.

All grade 5 racial/ethnic groups made appreciable gains in Mathematics Total Skills and Mathematics Advanced Skills in 2000 from 1996. At grade 8, a similar trend was observed except for Asian students whose 2000 performance was notably less in Mathematics Total Skills and Mathematics Advanced Skills from 1996.

The gap between the scores of grade 5 White students and Black students was smaller in 2000 than in 1996 for all Total Skills and Advanced Skills subtests. A similar trend was observed at grade 8 except that in Reading and Mathematics Total Skills, the gaps were about the same both years.

Scholastic Assessment Test (SAT)

White students represented the majority of test takers in the state in 2000 (64.3 percent) and the nation (56.5 percent), followed by Black students with 18.6 percent (nearly double that of their counterparts in the nation [9.5 percent]). In 2000, White students continued the historical trend of better performance on the SAT than other racial/ethnic groups in North Carolina. White students attained the highest mean total SAT score (1035), followed by Asians who scored 1024. Nationally, Asians scored 1064, followed closely by Whites who scored 1058.

In 2000, North Carolina's mean total SAT score was 988, with Whites scoring the highest (1035) and Blacks scoring the lowest (835), 200 points lower than White students. In comparison, the national average was 1019 in 2000, with Whites scoring 1058 and Blacks scoring 860 (again about a 200 point Black-White gap). In 1997, the Black-White gap was 195 points.

Hispanic students were the only racial/ethnic students in North Carolina scoring higher than their national counterparts in 2000 and previous years. North Carolina's Hispanics scored 970 in 2000, 52 points higher than their national counterparts.

Advanced Placement (AP) Examinations

White students represented the highest percentage (81.2) of North Carolina's students taking AP examinations in 2000, followed by Black students with 8.7 percent. Black students comprise 31 percent of the public school population in North Carolina; thus, they were underrepresented among AP examination test takers.



White and "Other" students had nearly 60 percent of AP scores equaling 3 or higher in 2000. Asian and Hispanic students were the only other racial/ethnic groups with 50 percent or more of scores equaling 3 or higher in 2000. Only about one-fourth of Black students' scores equaled 3 or higher in 2000.

Trends in Achievement by Ethnicity: Gains and Gaps, 1993-2000

In reference to reading achievement levels, the gap between the percent of White students at/above grade level and Black, Hispanic, and American Indian students at/above grade level, respectively, has decreased over time. American Indians have reduced the gap with White students more than any other racial/ethnic group. The gap between White and Asian students has increased since 1994-95 and has remained relatively steady in the last three years.

EOG mathematics achievement level score trends show even greater gains than reading score trends for the state as a whole and for all racial/ethnic groups. The gap with White students has decreased at an even greater rate for Black, Hispanic, and American Indian students since the ABCs of Public Education was implemented. Asians have made gains in percent at/above grade level in mathematics, but the percent at/above grade level, previously greater than White students, has closed to only slightly above that of White students.

EOG reading mean scale scores indicate that the state as a whole and all racial/ethnic subgroups made gains since 1993, and especially since 1996-97 with the implementation of the ABCs of Public Education. The gaps between minority groups and White students have not been reduced (with the exception of a small reduction between American Indian and White students) but appear to have remained steady. The gap between Asian and White students has increased since 1995-96.

All subgroups have made gains on mathematics scale scores since 1993 or 1994. Gains for most groups, especially American Indians, were greater after implementation of the ABCs of Public Education. Gaps with White students have not decreased on mathematics scale scores. Asian students continue to score *above* White students in mathematics, but the size of the positive gap has decreased due to faster growth by White students.

EOG Achievement Gap (Proficiency in Both Reading and Mathematics)

Both White and minority students have made impressive progress over the past seven years on EOG tests. The EOG achievement level gap between White students and minority students (including Asians) in both reading and mathematics combined has narrowed by only 5.4 points since 1993. Without Asians in the minority group, the achievement gap between minority students and White students has narrowed by only 3.6 points over the same period.

EOG Transitions by Race/Ethnicity

All racial/ethnic groups had higher percentages of students progressing to higher achievement levels in reading from Levels I, II, and III in 1999-00 than in 1996-67, except Asians from Level I. The percentages of White students progressing to higher achievement



levels from LevelsI, II, and III in reading exceeded those of Black students by approximately 7 percent, 14 percent, and 14 percent from Levels I, II, and III, respectively.

All racial/ethnic groups had higher percentages of students progressing to higher achievement levels from Levels I, II, and III in mathematics in 1999-00 than in 1996-67, except Asian from Level III and Multi-Racial from Level I. American Indians, Blacks, and Whites had higher percentages of students maintaining Level IV in 1999-00 than in 1996-97. Asian, Hispanic and Multi-Racial students showed an opposite trend.

On mathematics EOG tests, the percentages of White students progressing to higher achievement levels from Levels I, II, and III exceeded those of Black students by approximately 6 percent, 14 percent, and 13 percent from Levels I, II, and III, respectively.

End of Course (EOC) Tests

In 1999-00, all racial/ethnic groups improved their performance on EOC tests from the previous year except American Indians, who scored a half percentage point lower. White students performed better than all other racial/ethnic groups, with 70.8 percent of students scoring at or above Level III.

White students, Asian students, and Multi-Racial students were the only racial/ethnic groups to score above the state average in 1999-00. Black students attained the lowest percentage of scores at or above Level III in 1999-00, scoring nearly 32 percentage points below White students.

Writing Assessment

At grades 4 and 7, all racial/ethnic groups have improved their scores from 1995-96 to 1999-00. For most groups, these improvements have been quite substantial. Asian students led all racial/ethnic groups in grade 4 writing in 1999-00, followed closely by White students. At grade 7, the opposite pattern was observed.

Black students had the lowest grade 4 writing score for the fourth consecutive year, continuing to have fewer than 50 percent of students scoring at or above proficient. At grade 7, American Indian students attained the lowest score in 1999-00, with nearly 60 percent of students scoring at or above proficient. The Black-White gaps in grades 4 and 7 writing were slightly smaller in 1999-00 than in 1995-96.

English II Writing Assessment

All racial/ethnic groups scored higher on the grade 10 writing assessment in 1999-00 than in 1995-96, except Asians who scored the same. Other than Asian students, all racial/ethnic groups improved markedly in 1999-00 from 1995-96.

Black students attained the lowest score on the grade 10 writing assessment in 1999-00, with only about 40 percent of students scoring at or above proficient. American Indian students also had fewer than 50 percent of students at or above proficient.



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Introduction

This first issue of the Minority Achievement Report: Trends in Subgroup Performance is a spin-off from the State of the State Report, which originated in 1989 pursuant to the School Improvement and Accountability Act enacted by the General Assembly of North Carolina. Trends in national and statewide test performance for North Carolina's public school racial/ethnic subgroups are presented in this report. Some strategies and initiatives proposed by various sectors of North Carolina's educational community for eliminating disparities in academic achievement of racial/ethnic subgroups in the state are also included. A condensed version of the information presented in this report has been historically included in the State of the State in the section titled, "Closing the Gap in Student Performance," but was discontinued in the 2000 report.

However, a number of events occurring in 1999 precipitated a resurgence in focus on the minority achievement gap in North Carolina and intensified the state's resolve to address the issue. Major among such events was the formulation of the joint commission on closing the achievement gap by the North Carolina General Assembly in 1999 (H1547). Also, in 1999, a series of articles on the minority achievement gap in North Carolina were printed in Raleigh's *The News and Observer* newspaper. These articles promoted public awareness of the minority achievement problem and received substantial public reaction.

The increased focus on closing the minority achievement gap in North Carolina continued into 2000. In January 2000, the North Carolina Justice and Community Development Center released the Exposing the Gap: Why Minority Students Are Being Left Behind in North Carolina report, which highlighted the gaps in achievement of White students and other minority students in North Carolina. In April 2000, the "Closing the Achievement Gap: Improving Minority and At-Risk Student Achievement Conference" was highlighted with State Superintendent Michael Ward's "Ten-Point Plan for Closing the Minority Achievement Gap." Several months later, the Evaluation Section of the North Carolina Department of Public Instruction published the results of its study of nine high minority, high poverty, high performing public schools. This report, "Closing the Achievement Gap: Views from Nine Schools," identified several themes common to high level achievement at all of the nine schools.

One major outcome of the resurgence of focus on minority student achievement was the establishment of the Closing the Achievement Gap section by the North Carolina Department of Public Instruction (also a component of Dr. Ward's "Ten-Point Plan"). With the establishment of the Closing the Achievement Gap section and other closing the gap initiatives by the Department of Public Instruction, the administration at the Department of Public Instruction called for the preparation of a minority achievement report and recommended that the "Closing the Gap in Student Performance" section be separated from the State of the State and published as a self-contained report.

The goals of the Minority Achievement Report: Trends in SubgroupPerformance overlap those of the State of the State. The report aims to (1) assist policymakers in gauging the progress and status of minority student achievement in North Carolina's public schools,



(2) facilitate the comparison of the academic achievement of racial/ethnic students in North Carolina with that of peer groups in the nation, and (3) apprise the public of the status of academic achievement among the various racial/ethnic subgroups in North Carolina.

This first issue of *Minority Achievement Report: Trends in Subgroup Performance* is divided into four sections:

Section 1, Factors Associated with the Minority Achievement Gap, is an overview of some of the variables contributing to the minority achievement gap that have been reported in the literature. This overview is not meant to be exhaustive, but is provided only to show the complexity of the achievement gap problem and the challenges that must be overcome to close it.

Section 2, Minority Student Achievement and National Standards, highlights minority student performance on such national standards as the National Assessment of Educational Progress (NAEP), the Iowa Tests of Basic Skills (ITBS), the Scholastic Assessment Test (SAT), and Advanced Placement (AP) Program examinations. Data are provided for comparing minority student achievement in North Carolina with that of peers in the nation.

Section 3, North Carolina's Minority Student Performance and State Standards, summarizes the performances of North Carolina's racial/ethnic groups on state-mandated tests. "Trends in Achievement by Ethnicity: Gains and Gaps, 1993-2000" presents EOG results for the different racial/ethnic groups from 1993 to 2000 in terms of percent at/above grade level and scale scores. "EOG Achievement Gap (Proficiency in Both Reading and Mathematics)" discusses the achievement gap trend between White students and Black students on EOG tests. "EOG Transitions by Race/Ethnicity" shows patterns of different racial/ethnic groups progressing on EOG tests in terms of achievement level, from year to year. Finally, this section presents the performance of racial/ethnic groups on EOC tests and writing assessments.

Section 4, Initiatives for Closing the Minority Achievement Gap, outlines the various strategies for closing the minority achievement gap. Some of these strategies are already in place, while others are in the process of being implemented.

In this publication, the minority achievement gap refers to the lower achievement levels of Hispanics (or Latino), African Americans (or Blacks), and Native Americans (or American Indians) relative to that of Whites. Due to the relatively larger number of Blacks (31.0 percent) than Hispanics (3.7 percent), Native Americans (1.5 percent), and Asians (1.8 percent) among minority groups in North Carolina's public schools, disparities in achievement between Black students and White students are often highlighted.



Section 1. Factors Associated with the Minority Achievement Gap

If the causes of the achievement gap were clearly known, the quandary of how to close it would not exist. L. Scott Miller (1995) of the College Board summarized the dilemma well when he stated, "There's no one culprit, no single button to push... It's a complex, multivariable equation with feedback loops all over the lot." Much of the research on the minority achievement gap has focused on identifying the factors that drive it. An overview of some factors frequently associated with the Black-White achievement gap is presented below. This overview is not meant to be exhaustive, but is provided to show the complexity of the achievement gap problem and the challenges that must be overcome to close it.

Anti-assimilationism

Low income minority students may interpret the differences they perceive between themselves and the culture of the school as evidence that academic success is actually undesirable, and direct their energies elsewhere (Ogbu 1987; Solomon 1992; Fordham 1993; Fordham & Ogbu 1987; Bourdieu 1977). Steele (1992) reported that many Black students perceive that schools are set up to make them assimilate. Black students, stated Steele, perceive that, to be valued and rewarded in school (and society), they must first master the culture and ways of the American mainstream. Since that mainstream is essentially White, continues Steele, many Black students believe that they must give up many particulars of being Black—styles of speech, appearance, value priorities, and preferences—at least in mainstream settings.

Steele explains further that the same offer has been made to every immigrant and minority group in America's history, but non-immigrant minorities such as Blacks and Native Americans are insulted by such an offer. Ogbu advances a similar argument that Blacks (involuntary minority), compared with Asians (voluntary minority) harbor deeper feelings of resentment against assimilating into traditional American society and resist acceptance of school norms and goals. This phenomenon might partially explain why Asians and, to some extent Hispanics, have more success in schools than Blacks and Native Americans.

Race Matters

According to Tim Simmons (1999), Staff Writer for Raleigh's *The News and Observer* newspaper, "Race, not poverty, drives a wedge between the test scores of Black and White children." Simmons' conclusion is based on the results of a five-month study conducted by Raleigh's *The News and Observer* newspaper. The classroom observations, test data, academic research, and parent, teacher and student interviews showed a link between racism and the Black-White test score gap.

He stated further that "skin color determines what adults expect from thousands of children—and what those children ultimately expect of themselves." Similarly, Greg Malhoit, Executive Director of the North Carolina Justice and Community Development Center, observed that "the statistics portray a tragic picture of minority educational achievement . . . Despite the end of segregation, the quality of a child's education still depends in large part on skin color." This



statement suggests that the Black-White test score gap might be a manifestation of a greater societal ill: a racial divide.

At the beginning of the Twentieth Century (1903), W. E. B. DuBois, a renowned Black sociologist, stated, "The problem of the Twentieth Century is the problem of the color line." In the middle of that century, the Supreme Court directly challenged the color line in America when it began decades of political and legal struggling over access of minority students to integrated schools.

Ironically, 46 years after Brown vs Board of Education outlawed the concept of separate but equal, America may be seeing a trend toward resegregation of schools. Many Blacks and Whites alike are beginning to re-embrace the concept of "separate but equal," a concept articulated in the 1896 Plessy vs Ferguson decision. Plessy vs Ferguson was overturned in 1954 by Brown vs Board of Education, which argued that separate schools were inherently unequal. The Black-White test score gap after the Brown vs Board of Education court decision has led some people to believe that American education has changed from "separate and unequal" to "together and unequal."

The National Task Force on Minority High Achievement (The College Board, 1999) concluded in its *Reaching the Top* report that "while it is difficult to quantify the overall negative impact of prejudice and discrimination on the educational fortunes of underrepresented minority students, we have strong reason to believe that it is large."

Poverty

When socioeconomic status is defined in strictly social and economic terms, it accounts for about a third of the Black-White test score gap (Hernstein and Murray, 1994; Hedges and Nowell, 1998). Educators and policymakers recognized the relationship between poverty and low academic achievement in 1965 when Title I was established (The College Board, 1999, Reaching the Top). Although previous research clearly shows that poverty negatively affects student achievement, the exact nature of the effect has not been established.

Research has also shown that poverty concentration at a school does not have to be extreme to negatively impact the achievement of poor and non-poor students alike at that school (The College Board, 1999, *Reaching the Top*). The poverty factor is exacerbated by the tendency of high poverty schools to have high turnover rates, which often slows down the curriculum. Since minority students are much more likely to be poor or to attend schools with high concentrations of poverty than White students, poverty takes a greater toll on the educational achievement of poor and nonpoor minority students (The College Board, 1999, *Reaching the Top*).

Black students and White students from similar economic levels and educational backgrounds would be expected to have similar SAT results. Yet, in 1999, the mean total SAT score for Black test takers from high income families (931 for >\$70,000) was fifty one points lower than for White test takers from low income families (982 for <\$20,000) (Department of Public Instruction, SAT Report 2000). Phillips et al. (1998) reported that parents' income differences by themselves have *almost* no effect on children's test scores. They suggested that the socioeconomic and educational background of previous generations (grandparents and great grandparents) was an important factor.



Academic Coursework

Disproportionately fewer Black and Hispanic students take challenging academic courses than White students. This disparity might be attributed to a number of factors. (1) Some schools use systems for "tracking" students into higher or lower level coursework. In such a system, test scores or previous grades might be used to determine eligibility for advanced courses. (2) Some schools open advanced courses to all students, but minority students choose not to enroll. (3) Sometimes, students enroll for advanced courses based on teachers' and/or counselors' recommendations, and minority students are less frequently recommended.

Peer Pressure

Ferguson (1998) reported that Black students might form peer groups that disengage from academic competition due to shared stereotype anxiety. Within Black peer groups, stated Ferguson, being smart is valued but 'acting' smart is frowned upon. Ogbu and Fordham (1986) reported that a group of students in a District of Columbia high school had come to view academic success as "acting white." Although some researchers view this phenomenon to be more of a symptom than a cause, Ferguson counters that even if it is not a cause of the gap, it can still be an impediment to closing the gap.

Teacher Quality

Several studies have provided evidence that the qualifications of teachers effect student achievement and are major variables in improving student learning and achievement (Sanders and Rivers, 1996; Ladd, 1996; and Ferguson, 1992). Sanders and Rivers (1996) reported that students who have "poor" teachers for several years are likely to achieve at a significantly lower level than comparable students who have had several years of "good" teachers. Fifth graders after three years with ineffective teachers averaged 54 to 60 points lower on achievement test scores than students who had spent three years with highly effective teachers (Sanders and Rivers, 1996). This tendency could have serious long-term effects on student achievement when one considers that three successive years of "bad" teachers can negatively impact student achievement for many subsequent years. The identification of "quality" teachers was based on how well their students achieved in one year of school; no "a priori" definition "good" or "poor" teacher was provided.

Hanushek (1992) reported that the difference between a good teacher and a bad teacher can be a full grade level of achievement in a school year. The research also shows a relationship between students' ability to perform on tests and the quality of the colleges attended by their teachers. A similar relationship has been shown between students' performance on tests and their teachers' performance on tests.

Parenting

Parents are just as important as teachers in improving students' levels of achievement. Parents' responsibility stated Ferguson (1998) "is to hold their children to the highest possible academic expectations, regardless of their own educational and economic backgrounds." Jencks and Phillips (1998) pointed out that the gap between the academic achievement of Black students and White students appears before kindergarten and persists into adulthood. Thus, they believe

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that changing parenting practices and making a greater social investment in children's early cognitive development might be promising strategies for closing the gap.

Grissmer, Flanagan, and Williamson (1998) hypothesize that the large score gains by blacks on NAEP assessments in the 1970s and 1980s might be linked to the increase in parental education that occurred during this period. Although the research is sparse on differences in parenting practices across various racial/ethnic groups, there may be differences in the academic expectations and standards of parents from the various groups. Unfortunately, the specific nature of such differences is not known. It is interesting that Black children are more likely than White children to report that their parents telephone teachers and/or attend school meetings (Cook and Ludwig (1988).

Phillips et al. (1998) suggested that in Black families the socioeconomic and educational status of the grandparents might offset the middle class status of the parents in certain parenting practices. For example, having books at home, reading to the child, and taking children on trips to the museum are practices that tend to be passed on from one generation to the next. Thus, a Black parent with a family income of over \$70,000 might have parenting practices like his/her parent whose family income was less than \$20,000.

Preschool

The National Task Force on Minority High Achievement in The College Board's *Reaching the Top* publication declared that "our society should be rapidly expanding access to high quality preschool for all underrepresented minority children." In 1996 only "about 63 percent of all African-American children and only 37 percent of all Latino children were enrolled in center-based preschool programs led by professional early childhood educators," stated the authors. Consequently, many minority children start school with an academic preparation that lags White children; most minority children never catch up.

Stereotype Threat

Steele and Aronson (1998) reported that black students may not perform as well as Whites on some standardized tests (e.g. IQ tests and SAT) due to "stereotype threat." Stereotype threat is a phenomenon whereby a student's test performance is impaired due to fear of confirming or fulfilling a negative racial stereotype. For example, a Black student may not do well on a standardized examination due to fear of inadvertently confirming or corroborating the stereotype that Blacks do not do well on standardized tests. A Black student experiencing stereotype threat might "spend more time doing fewer items less accurately." This phenomenon might also be applicable to other groups subject to stereotype threats such as a Black or White female student taking a mathematics or science test. Academically successful students are most vulnerable to "stereotype threat" because confirming a negative stereotype threatens something they really care about.

Ethnographic studies by Willis (1977) and McLeod (1987) have provided support for Steele's theory. These studies showed that Black and White low-income youth "rejected the social norms of the society that they perceived as having rejected them." Ironically, this type of rebellion resulted in the same stereotypes they were trying to avoid and effectively



reduced further their already limited opportunities.

Summer Slide

Heynes (1987) pointed out that socioeconomic data make a strong case that a large portion of the difference in achievement levels between middle-class and poor students (majority and minority students) is due to different summer learning (not learning) rates. Heynes' argument is based on the premise that when school is not in session, learning opportunities for children continue. The problem, according to Heynes, is that learning opportunities and resources are greater for middle-class children than for disadvantaged children. Thus, students from low-income families lose more ground academically during summer months than students from higher income families (Entwisle and Alexander, 1992). Students from poor and affluent backgrounds learned at about the same rate during the school year, but, during the summers, wealthier students kept on learning. In contrast, students from poor backgrounds did not learn during the summers and sometimes lost ground. Over the course of several years, the researchers noted that this effect could be quite dramatic. Wealthier students tended to attend camps, go on vacation, and visit libraries during the summers, continuing to learn. Conversely, poorer students tended to "tread water" academically from June to August.

Teacher Expectations

Students tend to perform according to their perception of how their teachers expect them to perform. Ferguson (1998) argued that "teachers' perceptions and expectations are biased in favor of whites and that teacher behaviors appear less supportive of Blacks." He concluded that the Black-White test score gap is sustained and perhaps expanded by teachers' perceptions, expectations, and behaviors. While teachers are taught that all students can learn, they must convince their students that this is truely their belief.

Household Media

A study conducted by the Kaiser Family Foundation (1999) showed that Black children are more likely to have some type of media (e.g. television, radio, tape player, CD player, video game system, or VCRs) in their bedroom than White children (p. 16). Black children, on average, are exposed to 2 more hours of media content per day than White children, with most of the difference accounted for by television exposure (p. 79). The study also reported evidence that a "digital divide" exists in America — that "young people's access to and use of computers varies substantially by median income of the community in which they live, or go to school, and, to a lesser degree, by race." (p. 80) Although Black, Hispanic and White children average the same amount of time using computers each day, Black and Hispanic children have much less access to computers at home.

Test Bias

Jencks (1998) identifies five possible varieties of racial bias in testing: labeling bias, content bias, methodological bias, prediction bias, and selection system bias. In his estimation, two of these biases, labeling bias and selection system bias, might render stan-



dardized tests harmful to Blacks as a group. For example, Jencks argues that labeling bias (the use of "intelligence" or "aptitude" tests to assess intelligence or aptitude when they really do not) is unfair to Hispanics and Blacks. People use the results of such tests to label Blacks, Hispanics, or Native Americans as less intelligent or having lesser intellectual aptitude. Similarly, Jencks argues that penalizing Blacks and Hispanics because social scientists are better at measuring the skills they lack than the skills they have is equally unfair, especially when such test are used to exclude them from college admission or jobs.

Genetics

Cultural and genetic notions of inferiority have been applied, in varying degrees, to most minority groups. However, the genetic theory of inferiority has been most commonly and persistently applied to Blacks (Pettigrew, Fredrickson, Knobel, Glazer, and Reed,1982). One of the most widely refuted theories regarding the White and minority achievement gap is that Black and other minority students do not perform as well as White students on tests due to intellectual deficits. This theory received major attention in 1994 with the publication of Murray and Herrnstein's *The Bell Curve*. This book highlighted some previously known facts regarding the gap between Blacks and Whites on I.Q. tests, the SAT, and college and high school grade-point averages. However, there is no indisputable evidence on the causes of these gaps. Nevertheless, a General Social Survey (Klugel, 1990) indicated that as many as 20 percent, or one in five Whites, still believe Blacks are genetically less intelligent than whites while as many as 35 percent of Whites believe blacks are less intelligent for other reasons.

School Size

New research has shown that the damaging effects of poverty on student achievement can be reduced with smaller school sizes (Howley and Bickey, 2000). In four widely divergent states (Georgia, Montana, Ohio, and Texas), smaller school size was a major positive factor in student achievement, regardless of race. It should be noted however that although all races are likely to be affected by the relationship between school size, poverty, and student achievement, minority children often live in communities with high poverty rates and attend schools that are too large to produce high levels of achievement.

Stigmas, Stereotypes, and Marginality

One theory for why Black students do poorly in school is that "they experience inordinate ambivalence and affective dissonance in regard to academic effort and success" (Fordham and Ogbu, 1986). The essence of this theory is that the history of slavery and racial discrimination in the United States has left a devastating effect on the psyche of many Black people in the form of stigmas, stereotypes, and marginality. Consequently, suggests the authors, many Black people doubt their own intellectual abilities and view academic success as something reserved for White people. Thus, the roots of the minority achievement gap, according to Singham (1998), "lie in complex and historically rooted ethnic relationships and characteristics."

Fordham (1996) suggests that underachievement among Black youths might be attributed partially to the feeling they have of being the stigmatized, subdominant minority group



opposite the dominant "Other" in mainstream White society. She asserted that Black adolescents, especially Black males, need to cultivate a sense of identity that recognizes the importance of academic achievement.

Steele believes that Blacks live under extra pressure brought on by historically rooted stereotypes, which tell them that they do not belong. He believes further that such pervasive stereotypes create a climate of intimidation, mistrust, and alienation that influence the development of skills that underlie both test scores and earnings.

Summary

Although many variables have been associated with the minority achievement gap, its exact nature is still not well understood. Clearly, however, the educational achievement gap is real; it is not an artifact (Singham, 1998). Because it is real, it must have an origin and hence a solution. Steele (1992) theorizes that the precise origin of the gap is complex and multidimensional. Perhaps his summation is an appropriate final word.

Clearly, something is missing from our understanding of black underachievement. Disadvantage contributes, yet blacks underachieve even when they have ample resources, strongly value education, and are prepared better than adequately in terms of knowledge and skills. Something else has to be involved. That something else could be of just modest importance—a barrier that simply adds its effect to that of other disadvantages—or it could be pivotal, such that were it corrected, other disadvantages would lose their effect.



Section 2. North Carolina's Minority Student Performance and National Standards

Background

While EOG and EOC tests permit monitoring of relative student achievement within North Carolina, they do not permit comparisons with student performance in other states. The Iowa Tests of Basic Skills (ITBS), in accordance with North Carolina's State Board of Education Policy Number HSA-A-005 and GS 115C-174.11, was adopted for this purpose in 1993. The National Assessment of Educational Progress (NAEP) is another assessment that permits comparisons of student performance across states. The NAEP, sometimes referred to as the "Nation's Report Card," was first administered in North Carolina in 1990.

The Scholastic Assessment Test (SAT) and Advanced Placement (AP) examinations, while not the best measures for comparing North Carolina's students to students in the nation, due to inequities in participation rate from state to state, may serve as references for discerning relative trends. In addition, the SAT and AP examinations are recognized as two of the most useful tools for assessing the academic preparation of individual students for post-secondary education. Thus, national and state SAT and AP examination results for 2000 and previous years are reported.

The performance of the various racial/ethnic groups on the NAEP, the ITBS, the SAT, and AP examinations are reported in this section. Differences in the performances of White students and other racial/ethnic groups are highlighted, with special focus on the White-Black achievement gap. In addition, data for comparing the achievement of North Carolina's racial/ethnic groups with that of their peers in the nation are provided.



National Assessment of Educational Progress (NAEP)

Background

The National Assessment of Educational Progress (NAEP), a federally mandated project, was established in 1969 to assess the educational achievement of elementary and secondary students in various subject areas. NAEP, sometimes called the "Nation's Report Card," is the most widely recognized effort to assess the knowledge of American students. It reports on the educational achievement of populations of students across the nation. It is not designed to produce information for individual students, teachers, schools or school districts. Every two years NAEP assesses nationally representative samples of more than 120,000 students in public and private schools in grades 4, 8, and 12. The academic subjects assessed by NAEP, which vary from year to year, include reading, mathematics, science, writing, history, geography, and the arts.

State NAEP assessments began in 1990 in response to legislation passed by Congress. This legislation authorized a voluntary Trial State Assessment (TSA) wherein representative samples of students from each jurisdiction agreeing to participate are selected. Although the legislation still emphasizes that the state assessments are developmental, "Trial" was dropped from the title of the assessment in 1996 based on numerous evaluations of the TSA program. The sampling process is designed to ensure that reliable state-level data are obtained regarding student achievement in each participating jurisdiction. Approximately 2500 students per grade are tested statewide.

NAEP uses scale scores ranging from 0 to 300 to assess student performance in science and writing and 0 to 500 in mathematics and reading. The scales summarize results across all three grades. In addition to scale scores, NAEP uses achievement levels to report results. Achievement levels are performance standards regarding what students should be expected to know and to do. NAEP's achievement levels are based on collective judgements of a representative panel of teachers, education specialists, and members of the general public. These judgements are translated into specific points on the NAEP scale that identify boundaries between levels of achievement. NAEP's achievement level definitions are listed in Table 1.



Table 1. <u>Definitions of the National Assessment of Educational Progress (NAEP) Achievement Levels</u>

Basic	This level denotes mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
Proficient	This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
Advanced	This level signifies superior performance.

Although achievement levels for NAEP have been required by law since 1988 (Public Law 100-297), the National Center for Education Statistics (U. S. Department of Education, 1999) has issued the following caution when interpreting NAEP achievement level data:

Upon review of the available information, the Acting Commissioner of Education Statistics agrees with the National Academy of Science (NAS) recommendation that caution needs to be exercised in the use of the current achievement levels, since in the opinion of the Academy ".... appropriate validity evidence for the cut scores is lacking; and the process has produced unreasonable results." (Pilligrino et al., 1999, p. 182.) Therefore, the Acting Commissioner concludes that these achievement levels should continue to be considered developmental and should continue to be interpreted and used with caution The Acting Commissioner and the Governing Board believe that the achievement levels are useful for reporting trends in the educational achievement of students in the United States.

NAEP assessed grades 4 and 8 mathematics and grades 4 and 8 science in North Carolina during the spring of 2000. However, the results are not available for inclusion in this report. A comprehensive summary of NAEP results from previous years has been included.

A chart of NAEP assessments in North Carolina from 1990, the initial state assessment, to 2001 is provided in Table 2. NAEP assessments scheduled from 2002 to 2010 are also shown. Note that NAEP assessments from 1990 to 1994 are referred to as "Trial State Assessments."



Table 2. Schedule of State National Assessment of Educational Progress (NAEP) Administrations: 1990 to 2010

Year	NAEP Assessments	Year	NAEP Assessments
1990	M athematics (Grade 8)	2002	Reading (Grades 4 & 8) Writing (Grades 4 & 8)
1992	M athematics (Grades 4 & 8)		,
	Reading (Grade 4)	2003	None Scheduled
1994	Reading (Grade 4)	2004	M athematics (Grades 4 & 8) Science (Grades 4 & 8)
1996	M athematics (Grades 4 & 8)		·
	Science (Grade 8)	2005	None Scheduled
1997	None Scheduled	2006	Reading (Grades 4 & 8)
1998	Reading (Grades 4 & 8)		Writing (Grades 4 & 8)
1990	Writing (Grade 8)	2007	None Scheduled
1999	None Scheduled	2008	M athematics (Grades 4 & 8)
			Science (Grades 4 & 8)
2000	M athematics (Grades 4 & 8)		20101100 (2.1300)
2000	Science (Grades 4 & 8)	2009	None Scheduled
2001	None Scheduled	2010	Readings (Grades 4 & 8)
			Writing (Grades 4 & 8)

Note: State assessments in 1990-94 were referred to as Trial State Assessments (TSA).

Further information on NAEP can be obtained at the following web site: http://nces.ed.gov/nationsreportcard/site/home.asp/.



Reading

Grade 4

Scale Scores

Table 3 shows the average scale scores for public school students by racial/ethnic backgrounds in North Carolina, the Southeast region, and the nation from 1992 to 1998. Figure 1 depicts the average scale scores and standard errors for public school students in North Carolina. The more notable results were as follows:

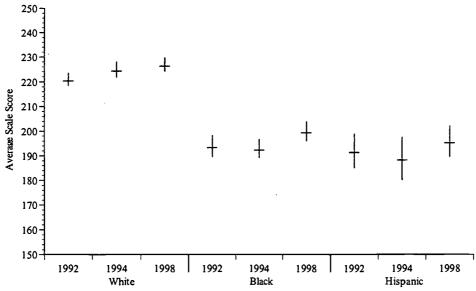
- Among North Carolina's grade 4 students, White students scored notably higher on the NAEP reading assessment than Black students and Hispanic students in 1998 and on the two previous assessments (1994 and 1992).
- All of North Carolina's grade 4 racial/ethnic groups attained higher average reading scale scores in 1998 than in 1992 (Figure 1).
- The gap between the performance of the state's Black students and White students narrowed from 32 points in 1994 to 27 points in 1998, a decrease of five points.
- For Hispanic students, the gap narrowed by the same amount, from 36 points in 1994 to 31 points in 1998.
- All racial/ethnic groups in North Carolina scored higher than their counterparts in the Southeast and the nation in 1998.

Table 3. <u>Average National Assessment of Educational Progress (NAEP) Reading Scale Scores for Public School Grade 4 Students in North Carolina, the Southeast, and the Nation by Race/</u> Ethnicity: 1992. 1994. 1998

	Year	Black	Hispanic	W hite	W hite- Black Gap
	1998	200 (2.0)	196 (3.2)	227.0	27.0
North Carolina	1994	193 (1.9)	189 (4.4)	225.0	32.0
	1992	194 (2.2)	192 (3.5)	221.0	27.0
	1998	190 (2.6)	191 (4.0)	220.0	30.0
Southeast	1994	188 (2.5)	184 (4.1)	219.0	31.0
	1992	194 (2.4)	194 (5.0)!	220.0	26.0
	1998	193 (1.8)>	195 (1.9)	225.0	32.0
Nation	1994	186 (1.7)	188 (2.7)	223.0	37.0
•	1992	192 (1.6)	199 (2.2)	223.0	31.0

The NAEP reading scale ranges from 0 to 500. The standard errors of the statistic appear in parentheses. If the notation appears, it signifies that the 1998 value was significantly higher (lower) than the value for 1994 at about the 95 percent confidence level. SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, and 1998 Reading Assessments.





Note: The NAEP reading scale ranges from 0 to 500.

<u>Figure 1</u>. Average National Assessment of Educational Progress (NAEP) Reading Scale Scores and Standard Errors for Public School Grade 4 Students in North Carolina by Race/Ethnicity: 1992, 1994, 1998.

Achievement Levels

Table 4 shows grade 4 reading achievement level results for public school students in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1992 to 1998.

- In 1998, a higher percentage of White students performed at or above the *Proficient* level than did Black and Hispanic students in North Carolina, the Southeast and the nation.
- The percent of North Carolina's White students at or above the *Proficient* level in 1998
 decreased by two points from 1994, although their average scale score increased by two
 points during the same period.



- White students, Black students and Hispanic students in North Carolina represented a higher percentage at or above the *Proficient* level than their counterparts in the Southeast in 1998.
- A higher percentage of Black students and Hispanic students in North Carolina were at or above the Proficient level in 1998 than their counterparts in the nation, while White students represented one percent less than their national counterparts.
- The percentages of White, Black and Hispanic students in North Carolina performing at or above the *Proficient* level did not differ significantly in 1998 from those in 1992.
- The percentages of White, Black and Hispanic students in North Carolina performing at or above the *Proficient* level did not differ markedly in 1998 from those in 1994.



	Percent At	
	or Above	
	<u>Proficient</u>	Gap
White	1998	•
White North Carolina	27 (1.0)	
South Caronna Southeast	37 (1.8) 31 (2.6)	++
N ation	38 (1.2)	++
Black	38 (1.2)	++
North Carolina	11 (1.6)	26
Southeast	8 (1.3)	23
N ation	9 (1.0)	29
Hispanic	7 (1.0)	29
North Carolina	13 (3.2)	24
Southeast	12 (3.8)	19
Nation	12 (1.3)	26
		20
White	1994	
North Carolina	39 (2.0)	++
Southeast	31 (2.9)	++
Nation	35 (1.5)	++
Black		
North Carolina	11 (1.5)	28
Southeast	9 (1.7)	22
N ation	8 (0.9)	27
Hispanic		
North Carolina	11 (3.1)	28
Southeast	8 (2.5)	23
N ation	12 (1.6)	27
White	1992	
North Carolina	33 (1.8)	++
Southeast	29 (3.9)	++
Nation	33 (1.9)	++
Black	33 (1.3)	
North Carolina	9 (1.8)	24
Southeast	9 (2.2)	20
Nation	8 (1.4)	25
Hispanic	- (,	
North Carolina	14 (3.8)	19
Southeast	12 (2.9)!	17
N ation	14 (1.8)	19

The standard errors of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value of the entire population is within ± 2 standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. If the notation >(<) appears, it signifies that the value for public school students was significantly higher (lower) than the value for 1992 at about the 95 percent confidence level. ! Interpret with caution--the nature of the sample does not allow accurate determination of the variability of this statistic. ++Not applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992, 1994, and 1998 Reading Association.

Note: Gap refers to the percent of White students minus the percent of each racial/ethnic group.



Scale Scores

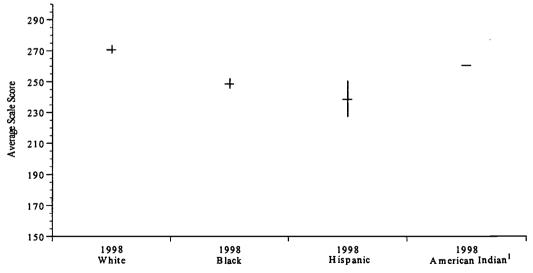
- North Carolina's White students scored higher than their American Indian, Black, and Hispanic peers in reading. This score was also higher than that of their White peers in the Southeast and the nation.
- North Carolina's White-Black gap on NAEP Reading was seven points smaller than that for the nation in 1998.

Table 5. Average National Assessment of Educational Progress (NAEP) Reading Scale Scores for Public School Grade 8 Students in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1998

Region	A merican Indian	Black	H isp anic	White	White-Black Gap
North Carolina	261 (2.6)!	249 (1.6)	239 (5.9)	271 (1.3)	22.00
Southeast	*** (**.*)	243 (2.5)	245 (2.7)	265 (1.9)	22.00
Nation	248 (4.8)!	241 (1.6)	243 (2.1)	270 (0.9)	29.00

The NAEP reading scale ranges from 0 to 500. The standard errors of the statistics appear-in parentheses. ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic. *** Sample size is insufficient to permit a reliable estimate. SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Reading Assessment.

 North Carolina's American Indian students scored higher than Black and Hispanic students, but their standard error could not be computed due to small sample size (see Figure 2).



Note: The NAEP reading scale ranges from 0 to 500.

¹Standard error could not be accurately determined due to small sample size.

<u>Figure 2</u>. Average National Assessment of Educational Progress (NAEP) Reading Scale Scores and Standard Errors for Public School Grade 8 Students in North Carolina by Race/Ethnicity: 1998.



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Achievement Levels

- In 1998, more grade 8 White students performed at or above the Proficient level than their Black, Hispanic, and American Indian peers in North Carolina, the Southeast, and the nation.
- American Indians had the next best performance in the state with 25 percent of grade 8 students scoring at or above the Proficient level in 1998.

Table 6. Percentages of Public School Grade 8 Students At or Above Proficient in Reading on the National Assessment of Educational Progress (NAEP) in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1998

	Percent At		
Grade 8	or Above Proficient	Gap	
White			
North Carolina	40 (1.8)	++	
Southeast	31 (2.6)	++	
N ation	38 (1.2)	++	
Black			
North Carolina	13 (2.1)	27	
Southeast	11 (2.0)	20	
N ation	11 (1.3)	27	
Hispanic			
North Carolina	12 (4.3)	28	
Southeast	13 (4.0)	18	
N ation	14 (1.3)	24	
American Indian			
North Carolina	25 (5.4)!	15	
Southeast	*** (**.*)	***	
N ation	18 (5.9)!	20	

The standard errors of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value of the entire population is within \pm 2 standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. ! Interpret with caution—the nature of the sample does not allow accurate determination of the variability of this statistic. *** (**.*) Sample size is insufficient to permit reliable estimate. ++Not applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Reading Association.

Note: Gap refers to the percent of White students minus the percent of each racial/ethnic group.



Writing

Grade 8

Scale Scores

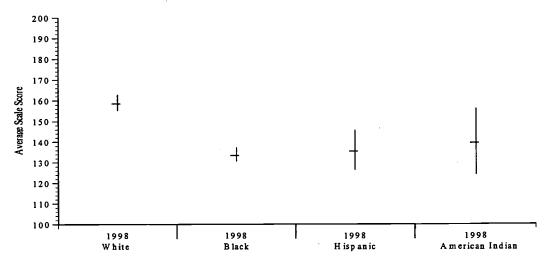
- In the first ever NAEP release of state-level writing results in North Carolina, White students attained the highest average score (159) among racial/ethnic groups in North Carolina, the Southeast and the nation (see Table 7).
- North Carolina's American Indian students (140) scored six points higher than Black students (134), four points higher than Hispanic students (136), but 19 points lower than White students in writing. Note: The standard errors of the means for American Indian and Hispanic students were notably larger than for White and Black students (Figure 3).

Table 7. Average National Assessment of Educational Progress (NAEP) Writing Scale Scores for Public School Grade 8 Students in North Carolina, the Southeast, and the Nation by Race/ Ethnicity: 1998

	A merican			White-Black		
Region	Indian	Black	H isp anic	White	Gap	
North Carolina	140 (8.1)	134 (1.7)	136 (4.9)	159 (1.9)	25.00	
Southeast	*** (*.*)	129 (1.6)	129 (3.0)	150 (1.4)	21.00	
Nation	131) 3.3)	130 (1.0)	129 (1.5)	156 (0.7)	26.00	

The NAEP writing scale ranges from 0 to 300. The standard errors of the statistics appear in parentheses. ***Sample size is insufficient to permit a reliable estimate.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Writing Assessment.



Note: The NAEP writing scale ranges from 0 to 300.

<u>Figure 3</u>. Average National Assessment of Educational Progress (NAEP) Writing Scale Scores and Standard Errors for Public School Grade 8 Students in North Carolina by Race/Ethnicity: 1998.



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• The gap between Black and White student writing scores (25 points) in 1998 was one point less than the gap in the nation, but four points more than in the Southeast.

Achievement Levels

- A higher percentage of White students performed at or above the proficient level than did other racial/ethnic groups in North Carolina, with the percentage of Whites exceeding the percentage of Blacks by 24 percentage points (see Table 8).
- The percentage of Hispanic students scoring at or above the proficient level was nearly double that of Black students in North Carolina. (This result must be interpreted with caution due to the large standard error of the mean for Hispanic students.)

Table 8. Percentages of Public School Grade 8 Students At or Above Proficient in Writing on the National Assessment of Educational Progress (NAEP) in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1998

	Percent At	
Grade 8	Proficient	Gap
White		
North Carolina	35 (2.2)	++-
Southeast	24 (2.5)	++
N ation	31 (1.0)	++
Black	, ,	
North Carolina	11 (1.6)	24
Southeast	6 (1.0)	1.8
Nation	7 (0.7)	24
Hispanic		
North Carolina	21 (5.6)	14
Southeast	11 (2.4)	13
Nation	10 (1.0)	21
American Indian		
North Carolina	17 (5.8)	18
Southeast	***(**.*)	***
Nation	8 (2.7)	23

The standard errors of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value of the entire population is within ± 2 standard errors of the estimate for the sample. ***(**.*) Sample size is insufficient to permit a reliable estimate. ++Not applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998 Writing Assessment.

Note: Gap refers to the percent of White students minus the percent of each racial/ethnic group.

Mathematics

Grade 4 (1992, 1996)

Scale Scores

• White students in North Carolina scored higher than their Black and Hispanic peers in the state (see Table 9 and Figure 4).



 The scale scores for Black and White students in North Carolina increased from 1992 to 1996; the White-Black scoring gap narrowed by one point from 1992 to 1996.

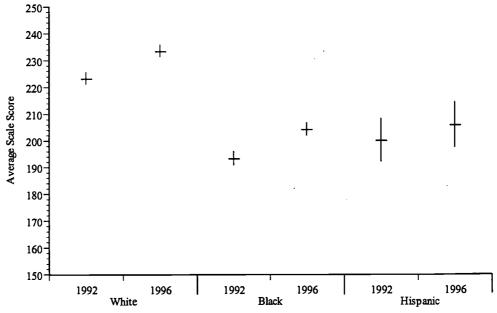
Table 9. Average National Assessment of Educational Progress (NAEP) Mathematics Scale Scores for Public School Grade 4 Students in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1992 to 1996

Region	Year	Black	Hispanic	White	White-Black Gap
North Carolina	1996	205 (1.2)>	206 (4.3)	234 (1.1)>	29.0
	1992	193 (1.3)	200 (4.1)	223 (1.1)	30.0
Southeast	1996	202 (2.2)>	194 (3.1)	226 (2.8)	14.0
	1992	191 (2.0)	200 (3.3)	220 (2.2)	29.0
Nation	1996	200 (2.4)	205 (2.2)	231 (1.1)>	26.0
	1992	192 (1.4)	201 (1.5)	227 (1.0)	35.0

The NAEP mathematics scale ranges from 0 to 500. The standard error of the statistic appear in parentheses. If the notation >(<) appears, it signifies that the value for public school students was significantly higher (lower) than the value for 1992 at about the 95 percent confidence level.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1996 Mathematics Assessments.

• Hispanic students in North Carolina scored higher than Black students, but the standard errors of their scores were more variable than the scores for Black students (see Figure 4).



Note: The NAEP mathematics scale ranges from 0 to 500.

<u>Figure 4</u>. Average National Assessment of Educational Progress (NAEP) Mathematics Scale Scores and Standard Errors for Public School Grade 4 Students in North Carolina by Race/Ethnicity: 1992 to 1996.



Achievement Levels

- In 1996, markedly more of North Carolina's grade 4 White students scored at or above *Proficient* in Mathematics than their Black and Hispanic peers (see Table 10).
- A higher percentage of White students, Black students, and Hispanic students were at or above the Proficient level in 1996 than in 1992; however, the increase was statistically significant (at the 0.05 level of confidence) only for White students.

Table 10. <u>Percentages of Public School Grade 4 Students At or Above Proficient in Mathematics on the National Assessment of Educational Progress (NAEP) in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1992 to 1996</u>

	Percent At	
	or Above	
	Proficien t	<u> </u>
	1996	
White		
North Carolina	29 (1.7)>	++
Southeast	20 (3.7)	++
N ation	26 (1.3)	++
Black		
North Carolina	4 (0.7)	25
Southeast	3 (1.2)	17
N ation	5 (1.5)	2 1
Hispanic		
North Carolina	10 (3.6)	19
Southeast	3 (1.5)	17
N ation	7 (1.0)	19
	1992	
White		
North Carolina	18 (1.2)	++
Southeast	15 (2.1)	++
N ation	22 (1.5)	++
Black		
North Carolina	2 (0.6)	16
Southeast	2 (0.9)	13
N ation	2 (0.7)	20
Hispanic		
North Carolina	7 (2.8)	11
Southeast	5 (1.9)	10
N ation	5 (1.0)	17

The standard errors of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value of the entire population is within ± 2 standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. If the notation >(<) appears, it signifies that the value for public school students was significantly higher (lower) than the value for 1992 at about the 95 percent confidence level. ++Not applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1996 Mathematics Assessments.

Note: Gap refers to the percent of White students minus the percent of each racial/ethnic group.



Scale Scores

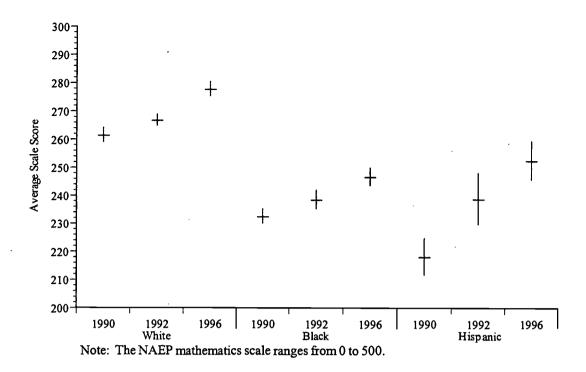
- In 1996, grade 8 White students in North Carolina attained higher average scale scores in mathematics than Black students and Hispanic students (see Table 11).
- White students, Black students, and Hispanic students in North Carolina increased their average scale scores each year from 1992 to 1996 as shown graphically in Figure 5. The increase by Hispanic students was not statistically significant.
- The increases in average mathematics scale scores in 1996 from 1990 were significantly higher for White students, Black students, and Hispanic students in North Carolina.
- The White-Black gap in average mathematics scale scores, although three points wider in 1996 than in 1992, was ten points and eleven points smaller than in the Southeast and the nation, respectively in 1996.

Table 11. <u>Average National Assessment of Educational Progress (NAEP) Mathematics Scale Scores for Public School Grade 8 Students in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1990 to 1996</u>

Region	Year	Black	Hispanic	White	White-Black Gap
North Carolina	1996	247 (1.6)»>	253 (3.5)»	278 (1.3)»>	31.0
	1992	239 (1.7)»	239 (4.7)»	267 (1.0)»	28.0
	1990	233 (1.3)	218 (3.3)	262 (1.3)	29.0
Southeast -	1996	234 (2.8)	243 (5.3)!	275 (2.2)»	41.0
	1992	234 (1.7)	241 (2.7)!	269 (1.1)	35.0
	1990	235 (4.5)	*** (**.*)	265 (2.9)	30.0
Nation	1996	242 (4.1)	250 (2.1)	281 (1.4)»	39.0
	1992	237 (1.3)	245 (1.3)	277 (1.1)»	40.0
	1990	237 (2.8)	242 (2.8)	270 (1.5)	33.0

The NAEP mathematics scale ranges from 0 to 500. Results are reported for racial/ethnic subgroups meeting established requirements. The standard error of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value for the entire population is with \pm 2 standard errors of the estimate of the sample. In comparing two estimates, one must use the standard error of the difference. If the notation >(«) appears, it signifies that the value for public school students was significantly higher (lower) than the value for 1990 at about the 95 percent confidence level. If the notation >(<) appears it signifies that the value for public school students was significantly higher (lower) than the value for 1992 at about the 95 percent confidence level. ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic. *** Sample size is insufficient to permit a reliable estimate SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1992 and 1996 Mathematics Assessments.





<u>Figure 5</u>. Average National Assessment of Educational Progress (NAEP) Mathematics Scale Scores and Standard Errors for Public School Grade 8 Students in North Carolina by Race/Ethnicity: 1992 to 1996.

Achievement Levels

- At grade 8 in 1996, a higher percentage of White students in North Carolina attained the *Proficient* level in mathematics than Black students and Hispanic students (Table 12).
- The percentage of Whites students attaining the Proficient level in 1996 increased significantly from 1992.
- The percentage of grade 8 Black students attaining the *Proficient* level in 1996 did not change markedly from 1992.
- The percentage of White students in North Carolina attaining the *Proficient* level in 1996 increased significantly from 1990. The percentages for Black students and Hispanic students in the state attaining this level did not change significantly.



Table 12. Percentages of Public School Grade 8 Students At or Above Proficient in Mathematics on the National Assessment of Educational Progress (NAEP) in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1990 to 1996

	Percent At	
	or Above	
Grade 8	Proficient	Gap
	1996	
White		
North Carolina	28 (1.6)»>	++
Southeast	22 (2.4)	++
N ation	30 (1.5)»	++
Black		
North Carolina	5 (1.0)	23
Southeast	2 (0.9)	20
N ation	4 (0.9)	26
Hispanic		
North Carolina	7 (2.8)	21
Southeast	5 (1.8)	17
Nation	8 (1.6)	22
	1992	
White		
North Carolina	16 (1.2)	++
Southeast	18 (1.3)	++
N ation	26 (1.3)»	++
Black		
North Carolina	3 (0.8)	13
Southeast	2 (0.7)	16
N ation	2 (0.7)	24
Hispanic		
North Carolina	5 (**.*)	11
Southeast	6 (2.9)	2
Nation	6 (0.8)	20
••••	1990	
White		
North Carolina	13 (1.0)	++
Southeast	15 (3.5)	++
Nation	19 (1.4)	++
Black		
North Carolina	2 (0.7)	11
Southeast	4 (1.5)	11
Nation	5 (1.1)	1 4
Hispanic		
North Carolina	1 (1.0)	12
Southeast	*** (**.*)	***
Nation	5 (1.5)	14

The standard errors of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value for the entire population is within \pm 2 standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. If the notation $>(\ll)$ appears, it signifies that the value for public school students was significantly higher (lower) than the value for 1990 at about the 95 percent level. If the notation >(<) appears, it signifies that the value for public school students was significantly higher (lower) than the value for 1992 at about the 95 percent confidence level. **** (**.*) Sample size is insufficient to permit a reliable estimate. ++Not applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1990, 1992, and 1996 Mathematics Assessments.

Note: Gap refers to the percent of White students minus the percent of each racial/ethnic group.



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Science

Grade 8 (1996)

Scale Scores

- Grade 8 White students in North Carolina scored higher in science than Black, American Indian, and Hispanic students in 1996 (see Table 13).
- North Carolina's White-Black gap in science was notably smaller than in the Southeast and the Nation in 1996.
- Amerian Indian students attained the next highest score in science, although the distribution of scores varied considerably (see Figure 6).

Achievement Levels

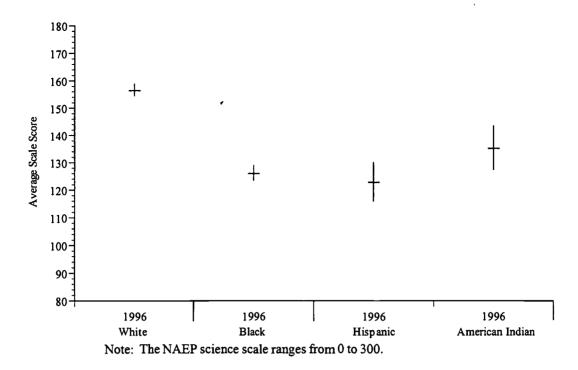
- A higher percentage of grade 8 White students in North Carolina scored at or above *Proficient* in Science in 1996 than Black students, American Indian students, and Hispanic students (see Table 14).
- American Indians had the next highest percentage of students at or above *Proficient*, followed by Hispanic students and Black students.

Table 13. Average National Assessment of Educational Progress (NAEP) Science Scale
Scores for Public School Grade 8 Students in North Carolina, the Southeast, and the Nation by
Race/Ethnicity: 1996

Region	A merican Indian	Black	H isp anic	White	White-Black Gap
North Carolina	136 (4.1)!	126 (1.4)	123 (3.6)	157 (1.1)	31.00
Southeast	*** (**.*)	116 (1.8)	126 (4.2)	153 (1.2)	37.00
Nation	148 (4.2)	120 (1.2)	127 (1.8)	159 (1.1)	39.00

The NAEP science scale ranges from 0 to 300. Results are reported for racial/ethnic subgroups meeting established sample size requirements. The standard error of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value for the entire population is within \pm 2 standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. ! Interpret with caution -- the nature of the sample does not allow accurate determination of the variability of this statistic. ***(**.*) Sample size is insufficient to permit a reliable estimate. SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Science Assessment.





<u>Figure 6</u>. Average National Assessment of Educational Progress (NAEP) Science Scale Scores and Standard Erors for Public School Grade 8 Students in North Carolina by Race/Ethnicity: 1996.



Table 14. <u>Percentages of Public School Grade 8 Students At or Above Proficient in Science on the National Assessment of Educational Progress (NAEP) in North Carolina, the Southeast, and the Nation by Race/Ethnicity: 1996</u>

	Percent At	
Grade 8	or Above Proficient	Gар
White	T TOTTETE II	Опр
North Carolina	33 (1.7)	++
Southeast	()	++
N ation	36 (1.8)	++
Black		
North Carolina	6 (1.0)	27
Southeast	()	
N ation	4 (0.8)	3 2
Hispanic		
North Carolina	8 (3.2)	25
Southeast	()	
N ation	10 (1.2)	26
American Indian		
North Carolina	14 (5.0)	19
Southeast	()	
N ation_	24 (5.8)	1 2

The standard error of the statistics appear in parentheses. It can be said with about 95 percent confidence that, for each population of interest, the value for the entire population is within ± 2 standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. ! Interpret with caution — the nature of the sample does not allow accurate determination of the variability of this statistic. *** Sample size is insufficient to permit a reliable estimate. --- (---) Data are not available. ++No applicable.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Science Assessment.

Note: Gap refers to the percent of White students minus the percent of each racial/ethnic group.



Iowa Tests of Basic Skills (ITBS)

Background

In 1992, the State Board of Education approved the Iowa Tests of Basic Skills (ITBS) Survey Battery for use in the North Carolina testing program. A major reason for adopting the ITBS was to facilitate the comparison of North Carolina's student achievement with national indicators. The ITBS has been administered annually in North Carolina to representative samples of students in grades 5 and 8 since the spring of 1993. Between 2400 and 2600 students per grade are tested statewide each year. No school or school system scores are available. The ITBS was adopted in lieu of the previously used California Achievement Tests (CAT) for several reasons. Among the reasons were: (1) it was more closely aligned with the mandated statewide curriculum, (2) it placed greater emphasis on higher-order thinking skills, and (3) it was more closely aligned with national curriculum standards.

The components of the ITBS Survey Battery are Reading, Language, and Mathematics. The Reading Test consists of two parts, Vocabulary and Reading Comprehension. While the Reading Total Skills score is based on the entire test, the Reading Advanced Skills score is based only on Reading Comprehension items.

The Language test consists of five parts: Spelling, Capitalization, Punctuation, Usage, and Expression. The Language Total Skills score includes all five parts, and the Language Advanced Skills score is based on two parts, Usage and Expression.

The Mathematics test includes four parts (Concepts, Estimation, Problem Solving, and Data Interpretation) plus a computation test. The Mathematics Total score is based on all five parts; the Mathematics Advanced Skills score is based on the Estimation, Problem Solving, and Data Interpretation parts.

Each student's Survey Battery Total score was calculated by averaging each student's standard score for the three tests. For example, averaging the Reading Total, Language Total, and Mathematics Total standard scores yields the Survey Battery Total standard score for each student.

The score types usually reported in ITBS reports are: Mean Standard Score, Grade Equivalent of Average Standard Score, Median Standard Score, Median National Percentile Rank, and Normal Curve Equivalent (NCE). ITBS results are reported below as median National Percentile Ranks (NPRs) of the developmental standard scores and are referenced to 1995 ITBS national student norms. NPRs permit the comparison of North Carolina's students with representative groups of students in the nation. When interpreting results from various sources, one should ensure that similar types of scores are being compared, since the different types of scores are not directly comparable.



Total Skills

Grade 5

Table 15 shows the National Percentile Ranks in Total Skills for grade 5 students in North Carolina by race/ethnicity from 1996 to 2000. A summary of the results is as follows:

- In Reading Total Skills, North Carolina's American Indian students, Black students, and Hispanic students made small improvements from their previous year's performance. White students scored about the same in 2000 as the previous year and Asian students scored several points less. Only White students scored at or above the national median, with Asian students scoring just one point below.
- All of North Carolina's racial/ethnic groups continued to perform poorly in Language Total Skills, with no improvement for any of the state's racial/ethnic groups from the previous year. All groups scored lower in 2000 than in 1999 except for Black students who scored the same.
- White students, Hispanic students, and Black students improved their performances in Mathematics Total Skills in 2000 from the previous year. Asian students scored nearly nine points lower and American Indian students scored nearly five points lower in 2000 than in the previous year.
- On the Survey Battery Total, only Black students and Hispanic students improved their previous year's ranks. Asian students and American Indian students ranked notably lower in 2000 than in the previous year, with White students ranking about a point lower.
- The gap between the scores of White students and Black students was smaller in 2000 than in 1996 for all skill areas.

Grade 8

Table 16 shows the National Percentile Ranks in Total Skills for grade 8 students in North Carolina by race/ethnicity from 1996 to 2000. A summary of the results is as follows:

- In Reading Total Skills, American Indian students and White students improved their ranks in 2000 from the previous years, and Hispanic students ranked the same. Black students scored less than a half point lower, while Asian students scored nearly 18 points lower than in the previous year.
- Only Asian students showed improved performance in Language Total Skills in 2000 from the previous year, and represented the only racial/ethnic group to reach the national median with a rank of 50. Hispanic students scored nearly ten ranks lower than in the previous year.
- No appreciably change in the gap between the scores of White students and Black students was observed.



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- In Mathematics Total Skills, only White students and Black students improved their ranks from the previous year. American Indian students, Asian students, and Hispanic students scored notably lower in 2000 than in the previous year. Only White students scored at or above the national median with a rank of about 64.
- On the Survey Battery Total, only White students increased their rank in 2000 from the previous year and they represented the only racial/ethnic group to rank at or above the national median. Notably, Asian students scored nearly 16 ranks lower in 2000 than in the previous year.

Table 15. National Percentile Ranks (NPRs) in Total Skills for Grade 5 Students in North Carolina on the Iowa Tests of Basic Skills (ITBS) by Race/Ethnicity: 1996 to 2000

	American					White-Black
Year	Indian	A sian	Black	Hispanic	White	Gap
			Reading			
2000	32.0	49.0	29.8	30.2	57.0	27.2
1999	28.5	53.2	27.1	29.8	57.3	30.2
1998	26.8	68.3	27.3	27.2	60.5	33.2
1997	28.5	38.3	29.5	27.0	57.5	28.0
1996	21.5	46.0	26.8	27.2	57.1	30.3
			Language			
2000	12.5	42.8	23.7	26.3	40.1	16.4
1999	25.0	46.0	23.7	30.0	40.5	16.8
1998	12.4	54.8	22.4	25.7	42.9	20.5
1997	25.0	52.3	25.7	26.0	42.7	17.0
1996	14.8	49.0	20.2	25.8	42.5	22.3
		I	Mathematic	s*		
2000	40.0	59.2	36.9	45.5	64.5	27.6
1999	45.5	68.0	33.4	37.4	62.0	28.6
1998	30.3	82.0	33.1	37.2	59.0	25.9
1997	42.6	59.0	32.5	33.0	58.9	26.4
1996	27.5	51.0	25.0	37.1	54.0	29.0
		Surv	ey Battery 7	fotal*		
2000	21.50	48.00	28.80	35.50	52.20	23.4
1999	29.00	61.00	27.70	31.30	53.40	25.7
1998	20.00	64.00	25.80	29.00	52.70	26.9
1997	28.00	45.00	27.90	31.00	52.40	24.5
1996	19.00	51.00	22.20	29.80	50.40	28.2

^{*}Without mathematics computation.



Table 16. National Percentile Ranks (NPRs) in Total Skills for Grade 8 Students in North Carolina on the Iowa Tests of Basic Skills (ITBS) by Race/Ethnicity: 1996 to 2000

Year	American Indian	Asian	Black	Hispanic	White	White-Black Gap
-			Reading			
2000	35.8	37.5	27.7	39.0	(2.1	24.4
1999	35.6	57.5 55.0	27.7	39.0 39.0	62.1 59.3	34.4
1998	28.0	57.0	28.4			31.3
1998	26.5			39.0	61.5	33.1
1997	20.3 35.7	36.0 52.0	24.6 24.7	35.8	61.8	37.2
1990	33.7	32.0	24.7	26.5	59.2	34.5
			Language			
2000	28.3	50.0	23.5	19.9	45.9	22.4
1999	28.3	43.0	25.7	29.5	49.5	23.8
1998	19.7	52.0	27.8	20.0	45.9	18.1
1997	22.7	40.8	25.8	29.5	51.5	25.7
1996	31.0	43.0	26.3	13.0	46.3	20.0
			Mathematic	cs*		
2000	42.8	49.0	32.7	38.2	64.3	31.6
1999	54.6	64.0	29.4	43.4	63.7	34.3
1998	32.6	74.0	29.0	38.4	59.2	30.2
1997	29.2	57.0	24.4	26.5	59.4	35.0
1996	29.2	58.8	23.8	24.3	55.4	31.6
		Sui	rvey Battery	Total*		
2000.0	30.0	39.5	25.7	26.5	56.0	30.3
1999.0	35.8	55.0	25.7	34.0	55.1	29.4
1998.0	27.8	60.5	27.1	32.0	53.5	26.4
1997.0	27.0	45.5	22.8	29.0	56.7	33.6
1996.0	32.0	53.0	22.9	18.5	52.4	29.5

^{*}Without mathematics computation.

Advanced Skills

Grade 5

Table 17 shows the National Percentile Ranks in Advanced Skills for grade 5 students in North Carolina by race/ethnicity from 1996 to 2000. A summary of the results is as follows:

- In reading advanced skills, grade 5 White students and Asian students in North Carolina equaled their previous year's performance in reading and continued to score above the national median. Grade 5 Black students and Hispanic students improved upon their previous year's performance in reading, but continued to score well below the national median. American Indian students scored nearly six points lower in 2000 than in the previous year.
- In language advanced skills, grade 5 White students, Asian students, and American Indian students scored slightly lower than in the previous year. Black students and Hispanic students equaled their previous year's score in 2000. All racial/ethnic groups in the state continud to score below the national median.



- In mathematics advanced skills, grade 5 White students, Black students, and Hispanic students made substantial gains in 2000. American Indian students and Asian students ranked lower than the previous year, but Asian students continued to rank above the national median.
- The gap between the scores of White students and Black students in Advanced Skills was smaller in all skill areas in 2000 than in 1996.

Table 17. National Percentile Ranks (NPRs) in Advanced Skills for Grade 5 Students in North Carolina on the Iowa Tests of Basic Skills (ITBS) by Race/Ethnicity: 1996 to 2000

Year	American Indian	Asian	Black	Hispanic	White	White-Black Gap					
	Reading										
2000	33.5	56.5	35.7	39.0	58.9	23.2					
1999	39.0	56.5	31.3	36.0	58.9	27.6					
1998	31.0	66.4	31.4	30.8	59.1	27.7					
1997	26.4	36.3	31.2	35.8	59.0	27.8					
1996	23.0	53.9	30.7	31.4	58.7	28.0					
			Language	:							
2000	23.7	38.1	23.9	30.7	44.1	20.2					
1999	24.3	38.2	23.9	30.7	44.3	20.4					
1998	17.8	44.3	23.6	31.1	44.2	20.6					
1997	27.5	43.6	24.2	31.0	44.1	19.9					
1996	21.0	38.2	18.5	23.7	44.1	25.6					
			Mathemati	cs							
2000	39.5	62.0	42.6	49.7	65.7	23.1					
1999	43.2	66.2	36.2	36.4	58.5	22.3					
1998	35.6	80.7	36.0	43.0	58.2	22.2					
1997	42.6	58.3	36.0	35.9	58.2	22.2					
1996	36.0	50.1	28.8	43.0	57.6	28.8					

Grade 8

Table 18 shows the National Percentile Ranks in Advanced Skills for grade 8 students in North Carolina by race/ethnicity from 1996 to 2000. A summary of the results is as follows:

• Hispanic students and White students were the only racial/ethnic groups to improve their ranks in Reading Advanced Skills in 2000 from the previous year. Hispanic students showed the largest gain, about 5 points. Asian students showed the largest decline in performance, scoring about 18 points lower in 2000 than in the previous year. White students represented the only racial/ethnic group to score at or above the national median with a rank of 61.4.



- In Language Advanced Skills, all racial ethnic groups continued to score poorly in 2000 except White students, who matched their previous years score and scored above the national median for the second consecutive year. Black students showed a small gain in 2000 from the previous year (less than a half point).
- Only grade 8 White students and Black students improved their performance in Mathematics Advanced Skills in 2000 from the previous year. Asian students, American Indian students, and Hispanic students performed notably lower in 2000 than in the previous year, with Asian students showing the greatest decline (about 18 points).
- The gap between the scores of White students and Black students in all Advanced Skills skill areas was slightly larger in 2000 than it was in 1996.

Table 18. National Percentile Ranks (NPRs) in Advanced Skills for Grade 8 Students in North Carolina on the Iowa Tests of Basic Skills (ITBS) by Race/Ethnicity: 1996 to 2000

Year	American Indian	Asian	Black	Hispanic	White	White-Black Gap
			Reading			
2000	37.0	47.5	28.4	44.7	61.4	33.0
1999	39.9	65.8	33.6	39.9	60.9	27.3
1998	39.8	58.0	34.0	39.8	61.0	27.0
1997	39.6	40.3	28.0	37.0	61.1	33.1
1996	39.8	50.3	28.3	31.0	60.9	32.6
			Language			
2000	29.6	41.3	29.7	27.5	53.7	24.0
1999	30.3	46.8	29.5	30.3	53.7	24.2
1998	25.0	44.0	29.8	19.3	47.4	17.6
1997	25.4	34.8	25.4	29.9	53.8	28.4
1996	34.9	30.1	25.5	18.9	47.4	21.9
			Mathematic	es		
2000	41.3	53.8	33.0	40.8	66.6	33.6
1999	48.4	71.6	32.8	48.2	61.2	28.4
1998	27.4	72.0	32.7	41.4	60.9	28.2
1997	32.9	57.5	27.3	26.8	61.0	33.7
1996	32.2	67.0	27.0	30.0	54.5	27.5



Scholastic Assessment Test (SAT)

Background

The Scholastic Assessment Test (SAT) is recognized as a useful tool for evaluating developmental verbal and mathematical abilities in individual students and in assessing their academic preparation for college admissions. Even with the criticism it has received regarding its fairness and efficacy (Jacobs, 1995), the SAT continues to be taken widely by students in North Carolina and the nation.

One function of the SAT is to provide scores to colleges and universities for assessing the academic preparation of college-bound students. In this regard, the College Board (1988) cautions that "using these scores in aggregate form as a single measure to rank or rate teachers, educational institutions, districts, or states is invalid because it does not include all students...in being incomplete, this use is inherently unfair." However, the Board sanctions the use of average SAT scores from a number of years to "reveal trends in academic preparation of students who take the test" (The College Board, 1988). SAT scores, the Board maintains, "can provide individual states and schools with a means of self-evaluation and self-comparison."

Students in North Carolina have shown steady improvement on the SAT each year since 1989. Since that time, teachers, principals, and policy-makers have focused on improving the quality of instruction, especially in content areas closely related to material included on the SAT.

A new version of the SAT was administered in March 1994. The scores from the new test were equated with scores from the previous test. All scores in this report have been equated with the new test. Consequently, 1995 scores in this report differ numerically from those for that year shown in the 1995 edition of *State of the State*.



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Results

Nationally, SAT takers in the graduating Class of 2000 were more racially/ethnically diverse than SAT takers who graduated from high school 10 years ago (College Board, 2000). Minority students comprised 34 percent of SAT takers in the Class of 2000, compared to 27 percent 10 years ago (College Board, 2000). This trend might suggest that more racial and ethnic minorities are aspiring to attend college than in previous years.

Table 19 shows the composition of test takers in North Carolina and the nation by racial/ethnic groups in 2000 and 1999. White students represented the majority of test takers in the state in 2000 (64.3 percent) and the nation (56.5 percent), followed by Black students with 18.6 percent (nearly double that of their counterparts in the nation [9.5 percent]).

White and Asian students in North Carolina and in the nation typically score higher than other racial/ethnic groups (see Figure 7). This trend continued in 2000 with North Carolina's White students attaining the highest mean total SAT score (1035), followed by Asians who scored 1024 (see Table 19). Nationally, Asians scored 1064, followed closely by Whites who scored 1058.

Hispanic students were the only racial/ethnic students in North Carolina scoring higher than their national counterparts in 2000 and previous years. North Carolina's Hispanics scored 970 in 2000, 52 points higher than their national counterparts. Table 19 shows however that Hispanics comprised a very small proportion of the total SAT test takers in North Carolina in 2000, representing only two percent compared to nine percent nationally.

Table 19. Number and Percent of Scholastic Assessment Test (SAT) Takers in North Carolina and the Nation by Race/Ethnicity: 1999-2000

			Number	and Percent	of Test Takers			
	_	North	Carolina			Na:	tion	
	20	000	19	999	20	00	19	99
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
American Indian	488	1.1	515	1.2	7,658	0.6	8,261	0.9
Asian	1,230	2.9	1,110	2.7	96,717	7.7	96,108	8.0
Black	8,026	18.6	7,858	19.1	119,591	9.5	119,394	9.8
Hispanic	690	1.6	580	1.4	97,872	7.8	94,667	7.7
White	27,717	64.3	27,145	65.9	712,105	56.5	717,632	60.1
Other	678	1.6	620	1.5	38,634	3.1	38,130	3.0
No Response	4,248	9.9	3,381	8.2	187,701	14.9	145,938	10.5
Total	43,077	100.0	41,209	100.0	1,260,278	100.0	1,220,130	100.0

Note: Percent columns may not total 100 due to rounding.



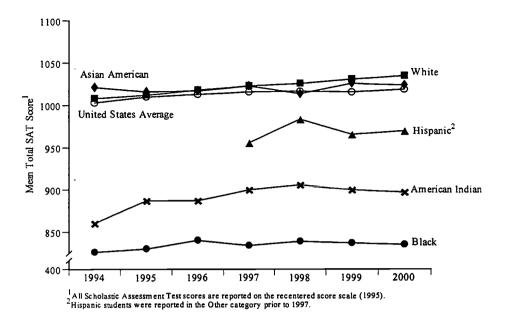


Figure 7. Mean Total SAT Scores for North Carolina by Ethnicity: 1994 – 2000.

North Carolina's Black students scored 835 in 2000, two points below the previous year's score (see Table 20). The 2000 performance represented the second consecutive year of declining scores for Black students who fell from 839 to 837 between 1998 and 1999. Conversely, the mean total SAT score for Black students in the nation (860) increased by four points from 1999.

Table 20. Mean Total SAT Scores for Students in North Carolina and the Nation by Race/ Ethnicity: 1994-2000

		1997			1998		1:	999		20	000	
	L'S	NC	Diff.	US	NC	Diff.	US	NC	Diff.	US	NC	Diff.
All Students American	1016	978	-38	1017	981	-36	1016	986	-30	1019	· 988	-31
Indian	950	900	-50	963	906	-57	965	900	-65	963	897	-66
Asian	1056	1023	-33	1060	1014	-46	1058	1026	-32	1064	1024	-40
Black	857	834	-23	860	839	-21	856	837	-19	860	835	-25
Hispanic	9 17	956	39	916	984	68	915	966	51	918	970	52
White	1052	1023	-29	1054	1026	-28	1055	1031	-24	1058	1035	-23
Other	1026	1013	-13	1025	998	-27	1024	1005	-19	1023	1016	-7

Notes: 1. All Scholastic Assessment Test scores are reported on the recentered score scale (1995).



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^{2.} A conventional table provided by Educational Testing Service was applied to the national and state subgroup means to convert the original means to the recentered scale.

Advanced Placement (AP) Examinations

Background

The Advanced Placement Program of the College Board is a cooperative educational endeavor that was introduced four decades ago to enable students to complete college-level studies while still in high school. The premise behind the program is that college-level material can be taught successfully to able and well-prepared secondary school students. Students may use these courses for college placement and/or credit, if they make the required grade on the AP examination. More than half the nation's high schools participate in the AP Program. In addition, more than 90 percent of the nation's colleges and universities permit incoming students to receive credit and/or placement if students make the qualifying AP scores.

The Advanced Placement Program uses a grading scale of one to five for its examinations. A grade of three or higher is the benchmark used by most institutions for awarding credit or advanced placement. The AP grading scale is as follows:

5 = Extremely well qualified

4 = Well qualified

3 = Qualified

2 = Possibly qualified

1 = No recommendation



Results

White students represented the highest percentage (81.2 percent) of North Carolina's 19,249 students taking AP examinations in 2000, a slight increase over the previous year's percentages (see Table 21). The only racial/ethnic group with fewer test takers in 2000 than in the previous year was the American Indian group. Some racial/ethnic groups continued to be underrepresented among the state's test takers relative to their proportion of the public school population. For example, although Black students make up 31 percent of the public school population in North Carolina, they comprised only 8.7 percent of the state's AP Examination test takers. Conversely, Asians, who account for only 1.8 percent of the state's public school population, represented nearly 5 percent of the state's AP test takers in 2000. Nationally, a similar trend of underrepresentation of Black students among AP Examination test takers can be observed (see Table 21).

Table 21. <u>Percent of Students in North Carolina and the Nation Taking Advanced Placement</u> (AP) Examinations by Race/Ethnicity: 1999-2000

			Numbe	r and Percen	t of Test Taker	s		
		Nort	h Carolina			Na	ation	
	20	00	19	999	20	00	19	99
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
American								
Indian	94	0.5	101	0.6	3,083	0.5	2,678	0.5
Asian	943	4.9	802	4.5	73,354	11.9	64,908	11.4
Black	1,677	8.7	1,524	8.5	31,667	5.1	27,263	4.8
Hispanic	297	1.5	247	1.4	65,172	10.6	54,748	9.6
White	15,622	81.2	14,169	79.0	410,956	66.5	365,799	64.4
Other	390	2.0	345	1.9	19,873	3.2	17,147	3.0
No	226	1.2	753	4.2	13,442	2.2	35 <u>,478</u>	6.2
Total	19,249	100.0	17,941	100.0	617,547	100.0	568,021	100.0

Note: Percent columns may not total 100 due to rounding.

Table 22 shows the percent of scores that were 3 or higher on Advanced Placement Examinations in North Carolina and the nation by racial/ethnic groups in 2000. "Other" students and White students in North Carolina had the highest percentage of scores equaling 3 or higher (58.0 percent) in 2000. Asian students had the next highest percentage of scores equaling 3 or higher (56.9 percent), followed by Hispanic students with 52.0 percent However, the percentages of "Other" (2.0 percent), Hispanic (1.5 percent) and Asian (4.8 percent) students represented very small proportions of the overall test takers in the state in 2000. Black students attained the lowest percent of scores equaling three or higher (26.5 percent) in 2000. The percent of AP scores equaling 3 or higher has decreased gradually each year for Black students in North Carolina since 1997.



The gap between the percentage of AP Examination scores equaling 3 or higher for White students and Black students in North Carolina narrowed from 30 points in 1998 to 28.8 points in 1999. However, in 2000 the Black-White gap in AP scores of 3 or higher increased by nearly 3 points from the previous year. During the period, 1997 to 2000, no trend in reducing the gap between the percentages of White students scores equaling three or higher and those for Black students in North Carolina is shown by the data.

The percentages of AP scores equaling 3 or higher for North Carolina's White students (58 percent), Other students (58 percent), and Asian students 56.9 percent were higher than that for the state (55.4 percent) in 2000. No racial/ethnic group in North Carolina attained a percentage of scores equaling 3 or higher that equaled the national percentage in 2000.

Table 22. <u>Percent of Advanced Placement (AP) Test Scores Equal to 3 or Higher in North Carolina and the Nation by Race/Ethnicity: 1997-2000</u>

		19	97		19	998		19	99	_	20	00
	US	NC	Diff.									
All Students American	62.9	58.0	4.9	62.6	58.1	4.5	61.9	54.2	7.7	62.1	55.4	6.7
Indian	50.3	39.5	10.8	51.0	40.8	10.2	48.0	41.9	6.1	49.8	45.7	4.1
Asian	65.9	64.3	1.6	65.4	63.5	1.9	64.1	57.7	6.4	64.0	56.9	7.1
Black	32.9	30.9	2.0	32.0	29.8	2.2	31.7	27.4	4.3	31.1	26.5	4.6
Hispanic	59.2	56.9	2.3	57.9	57.7	0.2	55.6	57.8	-2.2	54.0	52.0	2.0
White	64.2	59.7	4.5	64.2	59.8	4.4	64.1	56.2	7.9	65.0	58.0	7.0
Other	62.8	61.7	1.1	62.0	57.9	4.1	61.1	62.9	-1.8	61.9	58.0	3.9
Black-White Gap	31.3	28.8	2.5	32.2	30.0	2.2	32.4	28.8	3.6	33.9	31.5	2.4

Dif. = The United States (US) score minus North Carolina's (NC) score.



Section 3. North Carolina's Minority Student Performance and State Standards

Background

The North Carolina statewide testing program has used state-developed tests to assess the academic achievement of the state's students since 1985-86, with the first administration of the Algebra I End-of-Course (EOC) test. The first End-of-Grade (EOG) tests were administered in the 1992-93 school year in an effort to establish assessment strategies that were more rigorous than the previously used California Achievement Tests. The tests currently in use are closely aligned with the mandated state curriculum and national standards and are designed to assess higher order thinking skills.

In addition to EOG and EOC tests, the state requires an Annual Writing Assessment, which measures student writing performance in grades 4, 7, and 10. The writing assessment was added to the North Carolina Testing Program in 1983-84 and was included in the ABCs to ensure that appropriate emphasis is placed on writing.

The writing assessment at grade 10, the English II Assessment of Writing, is one of the state-mandated end-of-course tests. This test assesses mastery of the writing curriculum, the application of grammatical skills, and achievement in literary analysis.

The performance of the various racial/ethnic groups on EOG tests, EOC tests, the Annual Writing Assessment, and the English II Assessment of Writing are reported in this section. The differences between the performances of White students and other racial/ethnic groups are highlighted, with special focus on the White-Black achievement gap.



Trends in Achievement by Ethnicity: Gains and Gaps, 1993-2000

Minority achievement and reduction of the achievement gap between specific ethnic subgroups and White students is a priority of the North Carolina General Assembly, the State Board of Education, and the North Carolina Department of Public Instruction. Gains made by ethnic subgroups and changes in the gap with White students are shown in the following trend charts.

While Black, American Indian and White student groups have likely remained reasonably stable across years, Asian and especially Hispanic-Latino students have changed more dramatically. Thus, trends for these two groups should be interpreted with a bit more caution, as the cohort for each year may reflect different students with greater or lesser needs. For example, the number of Hispanic students tested has increased by three-fold between 1993-94 (the first year Hispanic data were collected) to 1999-2000 (from 7,135 to 22,685). The number of Asian students tested during that same time period almost doubled (from 5,643 in 1993-94 to 10,248 in 1999-2000).

Percent At/Above Grade Level

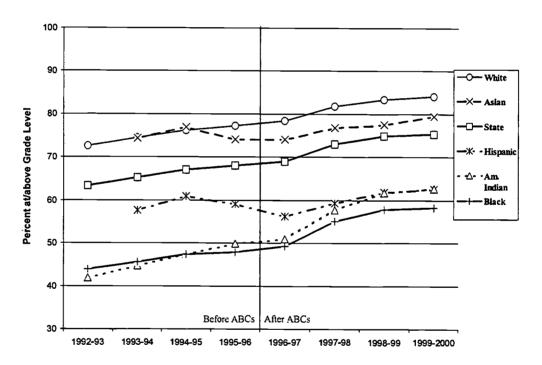


Figure 8. Percent of Grades 3-8 Students At/Above Grade Level on EOG Reading Tests by Race/Ethnicity: 1993-2000.

Figure 8 shows that all subgroups have made gains in percent of students scoring at Achievement Levels III and IV (at/above grade) since 1993, and especially since 1996-97 after the ABCs Accountability Model was implemented. The gap between percent of White students at/above grade level and Black, Hispanic, and American Indian students at/above grade level, respectively, has decreased over time. American Indians have made the greatest reduction in the gap with White students. The gap between White and Asian students has increased since 1994-95 and has remained relatively steady in the last three years.



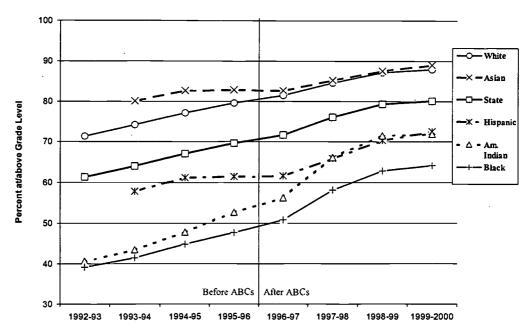


Figure 9. Percent of Grades 3-8 Students At/Above Grade Level on EOG Mathematics Tests by Race/Ethnicity, 1993-2000.

EOG mathematics score trends (see Figure 9) show even greater gains for the state as a whole and for all ethnic subgroups. The gap with White students has decreased at an even greater rate for Black, Hispanic, and American Indian students since the ABCs Accountability Model was implemented. Asian students have made gains in percent at/above grade level, but the percent at/above grade level, previously greater than White students, has closed to only slightly above that of White students.

Mean Scale Scores

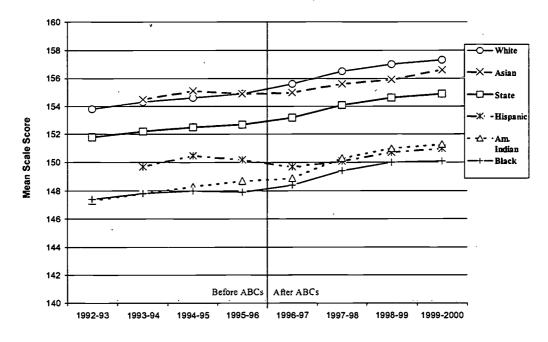


Figure 10. Mean Scale Scores for Grades 3-8 Students on EOG Reading Tests by Race/ Ethnicity: 1993-2000.



The state as a whole and all ethnic subgroups made gains on EOG Reading Mean Scale Scores (MSS) since 1993, and especially since 1996-97 with the implementation of the ABCs Accountability Model (see Figure 10). However, gaps between minority groups and White students have not been reduced (with the exception of a small reduction between American Indian and White students) but appear to have remained steady. The gap between Asian and White students has increased since 1995-96.

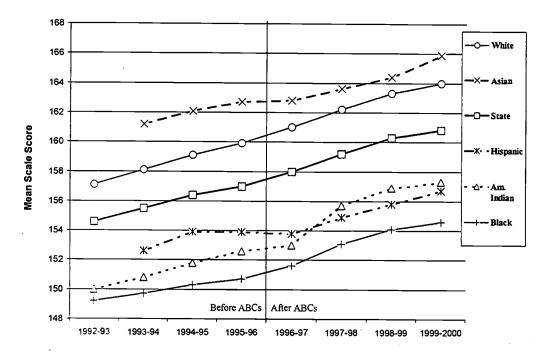


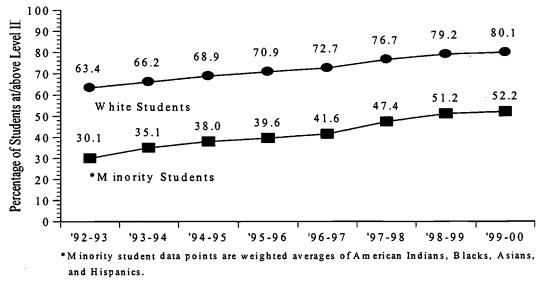
Figure 11. Mean Scale Scores for Grades 3-8 Students on EOG Mathematics Tests by Race/Ethnicity: 1993-2000.

As with reading, all subgroups have made gains on mathematics scale scores since 1993 or 1994 (see Figure 11). Gains for most groups, especially American Indians, were greater after implementation of the ABCs Accountability Model. However, gaps with White students have not decreased on mathematics scale scores. Asian students continue to score *above* White students in mathematics, but the size of the positive gap has decreased due to faster growth by White students.



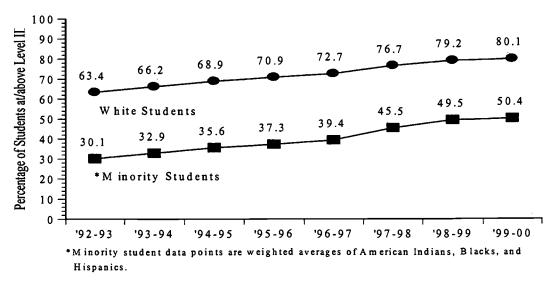
EOG Achievement Gap (Proficiency in Both Reading and Mathematics)

Figure 12 shows the percent of North Carolina's minority students (including Asians) and White students scoring at or above Level III in both reading and mathematics from 1993 to 2000. The graphs show that both White and minority students have made impressive progress over the past seven years on EOG tests. However, the graph also shows that while the gap has narrowed in recent years, it is still much too wide. For example, the gap was 33.3 points in 1993 and 27.9 points in 2000, a narrowing of only 5.4 points.



<u>Figure 12.</u> Percentages of North Carolina's Minority Students (including Asians) and White Students in Grades 3-8 Scoring at or above Level III in both Reading and Mathematics: 1993-1999.

In Figure 13, which does not include Asian students in the minority group, the EOG achievement gap between minority and White students was 29.7 in 2000, compared to 33.3 in 1993, a difference of only 3.6 points. Thus, without Asians in the minority group, the achievement gap between minority students and White students has narrowed even less since 1993.



<u>Figure 13.</u> Percentages of North Carolina's Minority Students (without Asians) and White Students in Grades 3-8 Scoring at or above Level III in both Reading and Mathematics: 1993-2000.



EOG Transitions by Race/Ethnicity

Another interesting way to describe End-of-Grade performance is to show the percent of students progressing to (or not progressing to) higher levels of performance from one year to the next. Such transitions for reading and mathematics EOG data by racial/ethnic groups are presented below.

American Indian Students

Table 23 shows the percent of American Indian students remaining at level, dropping to lower levels, or progressing to higher achievement levels in reading in 1996-97 (the first year of the ABCs) and 1999-00. More American Indian students moved to higher achievement levels from Levels I, II, and III in 1999-00 than in 1996-97. Conversely, fewer American Indian students remained at the same level or dropped to lower levels in 1999-00.

Table 23. <u>Percent of American Indian Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Reading End-of-Grade (EOG)</u>
Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	53.2	58.1	4.9
	At Level I	46.7	41.9	-4.8
Level II	Above Level II	27.5	31.4	3.9
	At Level II	56.3	53.6	-2.7
	Below Level II	16.2	14.9	-1.3
Level III	Above Level III	11.3	13.1	1.8
	At Level III	65.9	64.2	-1.7
	Below Level III	22.8	22.7	-0.1
Level IV	At Level IV	62.9	62.7	-0.2
	Below Level IV	37.1	37.3	0.2



On Mathematics End-of-Grade Tests, American Indian students demonstrated achievement patterns similar to their performance in Reading (see Table 24). However, the changes in percentages of American Indian students progressing from Achievement Levels I and II to higher levels in Mathematics from 1996-97 to 1999-00 were more than twice those in Reading. Conversely, the percentages of students falling to lower levels in Reading in 1999-00 were smaller than those in 1996-97, particularly at Level II.

Table 24. Percent of American Indian Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Mathematics End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	53.7	66.8	13.1
	At Level I	46.2	33.3	-12.9
Level II	Above Level II	29.8	40.5	10.7
	At Level II	50.1	46.3	-3.8
	Below Level II	20.1	13.3	-6.8
Level III	Above Level III	15.0	17.4	2.4
	At Level III	64.0	62.5	-1.5
	Below Level III	22.0	20.1	-1.9
Level IV	At Level IV	71.6	73.9	2.3
	Below Level IV	28.4	26.1	-2.3

Asian Students

The percentages of Asian students in Grades 3-8 remaining at Level, dropping to lower levels, or progressing to higher achievement levels on reading End-of-Grade (EOG) Tests in 1996-97 and 1999-00 are shown in Table 25. At Level I fewer Asian students progressed to higher reading achievement levels in 1999-2000 than in 1996-97. However, at Levels II and III, more Asian students moved to higher reading achievement levels in 2000 than in 1996-97.

Table 25. <u>Percent of Asian Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Reading End-of-Grade (EOG) Tests:</u> 1996-97 and 1999-00

START OF	END OF			
YEAR	YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	74.5	63.8	-10.7
	At Level I	25.5	36.2	10.7
Level II	Above Level II	39.5	43.7	4.2
	At Level II	51.5	47.6	-3.9
	Below Level II	9.0	8.7	-0.3
Level III	Above Level III	24.8	26.0	1.2
	At Level III	64.3	62.9	-1.4
	Below Level III	10.9	11.1	0.2
Level IV	At Level IV	85.2	84.0	-1.2
	Below Level IV	14.8	16.1	1.3



On Mathematics EOG tests, the percentages of Asian students moving to higher achievement levels from Levels I, II, and III in 2000 were consistent with those in 1996-97 (see Table 26). A similar trend is observed for Asian students remaining at level and dropping below level from 1996-97 to 1999-00.

Table 26. Percent of Asian Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Mathematics End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	73.0	73.3	0.3
	At Level I	27.0	26.7	-0.3
Level II	Above Level II	49.0	50.0	1.0
	At Level II	44.2	42.2	-2.0
	Below Level II	6.8	7.8	1.0
	·			
Level III	Above Level III	28.8	27.4	-1.4
	At Level III	61.6	61.7	0.1
	Below Level III	9.7	10.9	1.2
Level IV	At Level IV	89.5	89.0	-0.5
	Below Level IV	10.4	11.1	0.7



Black Students

Table 27 shows the percent of Black students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Reading End-of-Grade (EOG) Tests in 1996-97 and 1999-00. Small percentages of Black students are moving to higher levels of achievement from year to year. This was the case in 1996-97 and continued in 1999-00. At Level I, slightly more than 50 percent of Black students progressed to a higher achievement level in 2000, while about half of the students remained at the same level as the previous year.

At Levels II and III, small increases were noted in the percentages of Black students moving to higher achievement levels in 2000, compared to the percentages in 1996-97. However, the percentages of Black students transitioning to higher achievement levels from Levels II and III were well below fifty percent both years.

Nearly forty percent of Black students at Level IV in 1999 fell to a lower achievement level in 2000. A similar percentage of Black students had dropped below level in 1996-97.

Table 27. Percent of Black Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Reading End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START O	F END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	53.2	58.1	4.9
	At Level I	46.7	41.9	-4.8
Level II	Above Level II	27.5	31.4	3.9
	At Level II	56.3	53.6	-2.7
	Below Level II	16.2	14.9	-1.3
Level III	Above Level III	11.3	13.1	1.8
	At Level III	65.9	64.2	-1.7
	Below Level III	22.8	22.7	-0.1
Level IV	At Level IV	62.9	62.7	-0.2
	Below Level IV	37.1	37.3	0.2



The performance of Black students on Mathematics EOG Tests in 1996-97 and 1999-00 were similar to those on Reading EOG Tests during the same period (see Table 28). However, increases in the percentages of Black students progressing from Levels I and II to higher achievement levels from 1996-97 to 1999-00 were larger. At Levels III and IV, the performance of Black students on Reading EOG Tests and Mathematics EOG Tests were comparable.

Table 28. Percent of Black Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Mathematics End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	55.9	62.5	6.6
	At Level I	44.1	37.6	-6.5
Level II	Above Level II	29.7	36.2	6.5
	At Level II	52.6	48.7	-3.9
	Below Level II	17.8	15.2	-2.6
Level III	Above Level III	12.4	14.1	1.7
	At Level III	62.9	62.4	-0.5
	Below Level III	24.8	23.5	-1.3
Level IV	At Level IV	68.0	69.4	1.4
	Below Level IV	32.0	30.6	-1.4

Hispanic Students

The percent of Hispanic students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Reading End-of-Grade (EOG) Tests in 1996-97 and 1999-00 is shown in Table 29. More Hispanic students moved from Levels I, II, and III to higher achievement levels in Reading in 1999-00 than in 1996-97. From Level I, nearly 61 percent of Hispanic students moved to higher achievement levels in 1999-00, about one percent more than in 1996-97. Less than 40 percent of Hispanic students progressed from Level II to higher achievement levels in 1999-00, over two percent more than in 1996-97. From Level III, less than 20 percent of Hispanic students moved to higher levels of achievement in 1999-00, although nearly three percent more than in 1996-97. At Level IV, fewer Hispanic students (70.2 percent) remained at level in 1999-00 than in 1996-97, a decrease of about three percent.

Table 29. Percent of Hispanic Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Reading End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	59.6	60.5	0.9
	At Level I	40.5	39.5	-1.0
Level II	Above Level II	33.8	36.1	2.3
	At Level II	52.0	51.4	-0.6
	Below Level II	14.2	12.5	-1.7
Level III	Above Level III	16.7	19.2	2.5
	At Level III	68.2	63.8	-4.4
	Below Level III	15.1	17.0	1.9
Level IV	At Level IV	73.5	70.2	-3.3
	Below Level IV	26.5	29.8	3.3



Table 30 shows the percent of Hispanic students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Mathematics End-of-Grade (EOG) Tests in 1996-97 and 1999-00. The movement trend in Mathematics was similar to that in Reading, except that the relative percentages of students moving up in Mathematics from level to level were larger. A similar trend had been observed in 1996-97. Also, more Hispanic students progressed from Levels I, II, and III to higher achievement levels in Mathematics in 1999-00 than in 1996-97, similar to their performance in Reading. At Level IV, nearly one percent more Hispanic students dropped below level in 1999-00 than in 1996-97.

Table 30. <u>Percent of Hispanic Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Mathematics End-of-Grade (EOG) Tests:</u> 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	65.0	65.6	0.6
	At Level I	35.0	34.5	-0.5
Level II	Above Level II	41.0	44.6	3.6
	At Level II	47.6	45.2	-2.4
	Below Level II	11.5	10.2	-1.3
Level III	Above Level III	19.7	20.5	0.8
	AtLevel III	62.8	62.3	-0.5
	Below Level III	17.5	17.2	-0.3
Level IV	At Level IV	77.3	76.4	-0.9
	Below Level IV	22.8	23.6	0.8

Multi-Racial Students

Table 31 shows the percent of Multi-Racial students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Reading End-of-Grade (EOG) Tests in 1996-97 and 1999-00. Higher percentages of Multi-Racial students moved from Levels I, II, and III to higher achievement levels in Reading in 1999-00 than in 1996-97. At Level IV, less than one-fourth of Multi-Racial students failed to maintain Level IV from the previous year.

Table 31. Percent of Multi-Racial Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Reading End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	61.5	67.3	5.8
	At Level I	38.5	32.8	-5.7
Level II	Above Level II	39.3	44.1	4.8
	At Level II	46.6	45.1	-1.5
	Below Level II	14.1	10.9	-3.2
Level III	Above Level III	19.5	22.5	3.0
	At Level III	62.7	61.5	-1.2
	Below Level III	17.8	16.0	-1.8
Level IV	At Level IV	77.5	76.2	-1.3
	Below Level IV	22.4	23.8	1.4



On Mathematics EOG Tests in 1999-00, the percent of Multi-Racial students moving from Level I to higher levels of achievement decreased four points from 1996-97 (see Table 32). However, at Level II, the percentage of Multi-Racial students moving to higher levels of achievement increased by nearly eleven points in 1999-00 from 1996-97. Unfortunately, the percentage of Multi-Racial students moving from Level II to higher levels of achievement in Mathematics in 1999-00 was still less than 50 percent. At Level III, less than one-fourth of Multi-Racial students moved to Level IV in 1999-00, about the same percentage that progressed in 1996-97. At Level IV, Multi-Racial students maintained their achievement level from the previous year with a fallback rate of only 20 percent.

Table 32. Percent of Multi-Racial Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Mathematics End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	72.2	68.2	-4.0
	At Level I	27.8	31.8	4.0
Level II	Above Level II	35.5	46.2	10.7
	At Level II	51.1	43.1	-8.0
	Below Level II	13.4	10.7	-2.7
Level III	Above Level IV	21.1	22.0	0.9
	At Level III	63.1	63.0	-0.1
	Below Level III	15.7	15.0	-0.7
Level IV	At Level IV	81.6	80.0	-1.6
	Below Level IV	18.3	20.1	1.8



White Students

Table 33 shows the percent of White students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Reading End-of-Grade (EOG) Tests in 1996-97 and 1999-00. White students improved their performance on Reading EOG Tests at all achievement levels from 1996-97 to 1999-00. Nearly 65 percent of White students moved from Level I, 46 percent from Level II, and 27 percent from Level III to higher achievement levels in 1999-00. These values were about six percent, seven percent, and four percent increases from 1996-97 at Levels I, II, and III, respectively. At Level IV, less than one-fourth of White students fell below that level the subsequent year.

Table 33. Percent of White Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Reading End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF	END OF			
YEAR	YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	58.7	64.9	6.2
	At Level I	41.3	35.2	-6.1
Level II	Above Level II	39.0	45.5	6.5
	At Level II	48.8	44.4	-4.4
	Below Level II	12.1	10.1	-2.0
Level III	Above Level III	23.1	26.8	3.7
	At Level III	64.3	61.2	-3.1
	Below Level III	12.5	12.0	-0.5
Level IV	At Level IV	80.4	81.7	1.3
	Below Level IV	19.5	18.3	-1.2



Table 34 shows the percent of White students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Mathematics End-of-Grade (EOG) Tests in 1996-97 and 1999-00. On Mathematics EOG Tests, White students improved in 1999-00 from 1996-97 at all four achievement levels. In 1999-00, nearly 70 percent of White students progressed from Level I to higher achievement levels, nearly four percent more than in 1996-97. At Level II, nearly 50 percent of White students progressed to higher achievement levels in Mathematics, with about 40 percent remaining, and ten percent dropping to Level I. At Level III, about 13 percent of White students dropped back in 1999-00, while 27 percent advanced to Level IV. A similar percentage of White students (14.3 percent) dropped from Level IV in 1999-00, with nearly 86 percent maintaining Level IV.

Table 34. Percent of White Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Mathematics End-of-Grade (EOG) Tests: 1996-97 and 1999-00

START OF YEAR	END OF YEAR	1996-97	1999-00	CHANGE
Level I	Above Level I	64.9	68.9	4.0
	At Level I	35.1	31.1	-4.0
Level II	Above Level II	42.5	49.8	7.3
	At Level II	45.5	40.4	-5.1
	Below Level II	11.9	9.8	-2.1
Level III	Above Level III	24.1	27.1	3.0
	At Level III	62.6	60.3	-2.3
	Below Level III	13.3	12.5	-0.8
Level IV	At Level IV	83.8	85.6	1.8
	Below Level IV	16.1	14.3	-1.8



Black-White Gap in EOG Transitions

Table 35 shows the gap between the percent of Black students and the percent of White students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Reading End-of-Grade (EOG) Tests in 1999-00. For achievement Levels I, II, and III, markably higher percentages of White students than Black students progressed to higher achievement levels in Reading in 1999-00 from the previous year. At achievement Level IV, nearly 20 percent more White students than Black students maintained that level in 1999-00 from the previous year.

Table 35. Gap between the Percent of White Students and the Percent of Black Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Reading End-of-Grade (EOG) Tests: 1999-00

START OF YEAR	END OF YEAR	BLACK	WHITE	GAP ¹
Level I	Above Level I	58.1	64.9	6.8
	At Level I	41.9	35.2	-6.7
Level II	Above Level II	31.4	45.5	14.1
	At Level II	53.6	44.4	-9.2
	Below Level II	14.9	10.1	-4.8
Level III	A bove Level III	13.1	26.8	13.7
	At Level III	64.2	61.2	-3.0
	Below Level III	22.7	12.0	-10.7
Level IV	At Level IV	62.7	81.7	19.0
	Below Level IV	37.3	18.3	-19.0

¹Gap refers to the percentage for White students minus the percentage for Black students.



Table 36 shows the gap between the percent of Black students and the percent of White students remaining at level, dropping to lower levels, or progressing to higher achievement levels on Mathematics End-of-Grade (EOG) Tests in 1999-00. As was the case in Reading, notably higher percentages of White students than Black students progressed to higher achievement levels from Levels I, II, and III in Mathematics from the previous year. The gaps between the percent of Black students and the percent of White students progressing to higher levels from Levels I, II, and III were slightly smaller for Mathematics than for Reading. Also, the gap between the percent of Black students and White students maintaining Level IV from the previous year was several points smaller in Mathematics than in Reading.

Table 36. Gap between the Percent of White Students and the Percent of Black Students in Grades 3-8 Remaining at Level, Dropping to Lower Levels, or Progressing to Higher Achievement Levels on Mathematics End-of-Grade (EOG) Tests: 1999-00

START OF YEAR	END OF YEAR	BLACK	WHITE	GAPl
Level I	A bove Level I	62.5	68.9	6.4
	At Level I	37.6	31.1	-6.5
Level II	Above Level II	36.2	49.8	13.6
	At Level II	48.7	40.4	-8.3
	Below Level II	15.2	9.8	-5.4
Level III	A bove Level III	14.1	27.1	13.0
	At Level III	62.4	60.3	-2.1
	Below Level III	23.5	12.5	-11.0
Level IV	At Level IV	69.4	85.6	16.2
	Below Level IV	30.6	14.3	-16.3

¹Gap refers to the percentage for White students minus percentage for Black students.

The EOG transition data when disaggregated by race/ethnicity shows that the percentage of Black students progressing to higher achievement levels from Levels I, II, and III in 1999-00 lags that of White students in both reading and mathematics. The data also shows that the percentage of Black students maintaining Level IV in 1999-00 lags that of White students by an appreciable amount in both reading and mathematics. A higher percentage of Black students need to progress from Levels I, II, and III to higher achievement levels from year to year while simultaneous with continued movement of White students to higher levels. The gap between the percentage of Black students and the percentage of White students maintaining Level IV from year to year must also be diminished in a similar manner.



End of Course (EOC) Tests

Background

North Carolina's End-of-Course (EOC) tests began in 1985-86 with the first administration of Algebra I. Since that time, ten other high school tests (Algebra II, Biology, Chemistry, ELPS, English I, English II, Geometry, Physical Science, Physics and U. S. History) have been added to the EOC Testing Program. Five of these tests (Algebra II, Chemistry, Geometry, Physical Science, and Physics) were briefly discontinued until 1998-99. Thus, only the 2000 EOC results and last year's EOC results are included in this report. The English II results are presented in a separate section.

Results

In 1999-00, all racial/ethnic groups improved their performance on EOC tests from the previous year except American Indians, who scored a half percentage point lower (see Figure 14). White students performed better than all other racial/ethnic groups, with 70.8 percent of students scoring at or above Level III. Asian students and Multi-Racial students attained the next highest percentages, 66.1 percent and 63.0 percent, respectively. White students, Asian students, and Multi-Racial students were the only racial/ethnic groups to score above the state average. Black students attained the lowest percentage of scores at or above Level III in 1999-00 (39.3 percent), scoring nearly 32 percentage points below White students. The nearly 32 point gap between EOC performances of White students and Black students in 1999-00 was the same in the previous year.

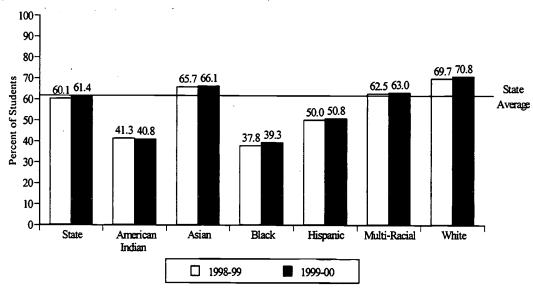


Figure 14. Composite of Percent of Students at or Above Level III on Ten (10) End-of-Course (EOC) Tests (Algebra I, Algebra II, Biology, Chemistry, ELPS, English I, Geometry, Physical Science, Physics, and U. S. History) by Race/Ethnicity: 1998-00.



Writing Assessment

Background

The annual writing assessment is a state-mandated assessment of student writing performance in grade 4, grade 7, and grade 10. The writing assessment was added to the North Carolina Testing Program in 1983-84 and was included in the ABCs to ensure emphasis is placed on this vital skill in each student's academic experience.

In addition, the revised *Standard Course of Study (SCS)* emphasizes writing as a basic skill that can be improved with appropriate emphasis and instruction. Three modes of writing are included in the writing assessment: narrative, expository, and descriptive. Grade 4 students are required to write a narrative composition (personal or imaginative), while grade 7 students are asked to write either an expository (clarification or point-of-view) or descriptive composition. The compositions in grades 4 and 7 are assigned scores of 1, 2, 3, 4, or Non-Scorable (NS). A composition is assigned NS when a student's response is not readable or otherwise un-scorable.

The standard for acceptable writing at grades 4 and 7 is 2.5 or above on a four-point scale. This standard is regarded as a representative and achievable level for grades 4 and 7 students.

Grade 4

Table 37 shows the percent of North Carolina's grade 4 students scoring 2.5 or higher on the Annual Writing Assessment in 1999. All racial/ethnic groups improved their scores over the previous year, except Other which scored 3.1 points lower than the previous year. Asian students (67.6 percent) led all racial/ethnic groups in Grade 4 Writing in 1999-00, followed closely by White students (63.5 percent). The racial/ethnic groups with the next highest scores were Multi-racial (58.9 percent), American Indian (51.5 percent), Other (49.4 percent), Hispanic (48.3 percent), and Black (46.3 percent). Black students had the lowest grade 4 writing score for the fourth consecutive year. However, the gap between grade 4 writing scores for Black students and White students narrowed by 1.4 points between 1995-96 and 1999-00.

Table 37. Percent of North Carolina's Grade 4 Students Scoring at or above 2.5 on the Annual Writing Assessment by Race/Ethnicity: 1996-1999

Year	American Indian	Asian	Black	Hispanic	Multi- Racial	White	Other	Black- White Gap
1999-00	51.5	67.6	46.3	48.3	58.9	63.5	49.4	17.2
1998-99	50.6	59.9	43.2	46.8	54.7	61.2	52.5	18.0
1997-98	38.8	58.9	37.8	40.5	54.3	58.7	51.8	20.9
1996-97	41.9	53.2	36.7	39.7	51.7	54.3	48.2	17.6
1995-96	37.7	63.0	38.6	46.6	52.7	57.2	54.6	18.6



Grade 7

Table 38 shows the percent of North Carolina's grade 7 students scoring 2.5 or higher on the Annual Writing Assessment. White students, Black students, and Other students were the only racial/ethnic groups scoring higher on the grade 7 writing assessment in 1999-00 than in the previous year. In 1999-00, White students (77.9 percent) led all racial/ethnic groups in scores at or above 2.5, followed by Asian students (76.4 percent), Multi-racial students (69.8 percent), Other students (65.2 percent), Hispanic and Black students (60.8 percent) and American Indian students (59.8 percent). The gap between grade 7 writing scores for White students and Black student (17.1 percent) in 1999-00 narrowed by 2.4 points from 1995-96.

Table 38. Percent of North Carolina's Grade 7 Students Scoring at or above 2.5 on the Annual Writing Assessment by Race/Ethnicity: 1995-96 to 1996-00

Year	American Indian	Asian	Black	Hispanic	Multi- Racial	White	Other	Black- White Gap
1999-00	59.8	76.4	60.8	60.8	69.8	77.9	65.2	17.1
1998-99	62.8	76.5	58.3	61.1	70.2	76.1	61.3	17.8
1997-98	47.6	68.7	47.6	53.1	64.9	69.7	56.3	22.1
1996-97	40.2	58.5	39.2	43.3	54.6	62.4	50.1	23.2
1995-96	46.3	66.5	46.4	52.3	59.6	65.9	52.2	19.5

English II Writing Assessment

Background

The English II Assessment of Writing is a state-mandated end-of-course test that assesses writing performance in grade 10. The test is a component of the North Carolina Statewide Testing Program and assesses mastery of the writing curriculum, the application of grammatical skills, and achievement in literary analysis. Student essays are scored on a six-point scale for content and a three-point, four-domain scale for conventions. The proficiency standard for English II is 3.0 and above on the six-point scale.

Grade 10

All racial/ethnic groups scored higher on the English II Writing Assessment in 1999-00 than in 1995-96, except Asian students who scored the same (see Table 39). In 1999-00, White students (65.5 percent) attained the highest percent of scores at or above the 3.0 standard for the fourth consecutive year. Asian students had the next best performance (58.6 percent) followed by Multi-Racial students (57.2 percent). Black students attained the lowest percentage (41.3 percent) for the third consecutive year.



The Black student White student scoring gap on the grade 10 writing assessment narrowed by 1.4 percent between 1995-96 to 1999-00.

Table 39. Percent of Grade 10 Students in North Carolina Scoring at or above 3.0 on the Annual English II Assessment: 1995-96 to 1999-00

Year	American Indian	Asian	Black	Hispanic	Multi- Racial	White	Other	Black- White Gap
1999-00	44.6	58.6	41.3	50.4	57.2	65.5	52.6	24.2
1998-99	41.1	59.1	38.8	47.3	55.5	65.2	54.9	26.4
1997-98	30.0	51.9	29.1	37.7	46.5	53.7	43.5	24.6
1996-97	30.1	57.3	33.1	42.0	53.4	57.4	53.9	24.3
1995-96	31.6	58.6	31.0	42.2	52.0	56.6	44.9	25.6



Section 4. Initiatives for Closing the Minority Achievement Gap

A number of aggressive initiatives have been launched at the national and state levels aimed at closing the minority student achievement gap. An overview of the major initiatives is reported below.

Superintendent Mike Ward's Ten-Point Plan

At the 2000 Improving Minority & At-Risk Student Achievement Conference, State Superintendent Mike Ward proposed 10 measures designed to help close the achievement gaps between students and to help challenge all students to reach higher standards. These measures call upon school administrators, parents, and communities across the state to find the will to close the achievement gaps between student subgroups. At the same time, he believes that North Carolina must stand firm on both high expectations set by the ABCs of Public Education and by the new Student Accountability Standards. With the support of the State Board of Education, he has proposed the following actions for the Department of Public Instruction and State Board to guide this effort.

- 1. Children at every performance level should improve academically. Students experiencing difficulty should be helped to reach proficiency and beyond. High performing students should reach even higher levels of achievement. The goal should be growth across all levels--with performance lines converging. The most immediate goal is closing the gaps in the percentages of students who are achieving at grade level.
- 2. Create a permanent advisory committee to the State Superintendent/Department of Public Instruction to address the issues of higher standards and closing performance gaps by race, gender and socioeconomic status. This group's actions will include issuing an annual report on the status of and progress toward closing gaps and challenging all students to higher levels.
- 3. Establish a section within the Department of Public Instruction to provide technical assistance to schools and school systems to help close the gaps. The ABCs assistance team approach will be used as the model for this section. These staff members and teachers-on-loan will work with other Department of Public Instruction staff to address best practices, alternative education, dropout prevention, instruction and testing, parent and community involvement, staff development and other areas.
- 4. Require local school systems to develop annual plans for closing gaps and challenging all students to higher levels. Conduct random reviews of these plans.
- 5. Develop budget requests for short session and the next biennium, 2001-03, and subsequent years of the Legislature for funds for DPI, local school systems and local schools to use in closing the gaps and challenging all students to higher levels of performance.
- 6. Direct \$4 million in Goals 2000 funds for 2000-01 to assist local school systems in



closing the gaps. These funds would go out to school systems in August (2000). Also, coordinate with other state, federal and private agencies and groups to secure funding and services that can help close gaps and challenge students.

- 7. Work with the five local school districts participating in the ABCs pilot program that rewards schools for improving performance of subgroups of students.
- 8. Seek funding and legislation to pilot dual language demonstration sites to help meet the needs of English language learners.
- 9. Develop a resource center for schools and school systems for information on best practices in closing gaps. This center would include information on available training in multicultural issues, what's working in high-performing schools and other resources.
- 10. Encourage local collaboration of school leaders, parents, the faith community, students, historically minority colleges and universities, other higher education institutions and other stake holders to hold community forums and take actions to support closing gaps and challenging students to higher levels of performance.

Five LEAABCs Pilot

Five schools will be selected to participate in this special pilot project. Under this pilot project, the state will give extra bonuses to teachers at schools where ten groups of students (6 racial/ethnic groups, 2 economic groups, and 2 achievement groups) meet growth standards similar to those in the ABCs. The project will encourage schools to work harder at getting minority students to succeed using strategies with demonstrated efficacy.

Excellent Schools Act

Undergirding the success of any school system is the quality of its teaching force. In recent years, North Carolina has raised teachers' salaries, offered bonuses to educators in successful schools, and awarded board-certified teachers with greater pay. The state has launched a vigorous campaign through the Excellent Schools Act to promote teacher standards and certification and to keep quality professionals in the state's classrooms.

Closing the Achievement Gap Section

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In his Ten-Point Plan for closing the minority achievement gap, State Superintendent Michael Ward called for the establishment of a section within the Department of Public Instruction to provide technical assistance to schools and school systems to help close the gaps. The Closing the Gap Section, under the leadership of its newly appointed Chief, is now in place.

The mission of the Closing the Achievement Gap Section is to provide the leadership necessary for fostering continued improvement of academic achievement of North Carolina's public school students. The Section will focus on school-related variables that adversely affect educational outcomes for minority and at-risk students in North Carolina. The Section



will also work in collaboration with the various stakeholders to assist schools and school systems in identifying and developing programs and strategies for closing the minority achievement gap. This goal will be addressed by creating awareness, providing technical assistance, and disseminating research findings on best practices for improving achievement among minority and at-risk students.

The following five (5) functional areas of operation will be the focus of the section:

- (1) **Technical assistance** to schools and school systems is critical and necessary to achieve the
 - goal of closing the achievement gap. The Section will provide technical assistance in curricu-
 - lum/instruction, test analysis/data disaggregation, parent/community involvement, business/in
 - dustry partnerships, diversity training, and other gap-related factors.
- (2) **Research findings** are a vital link to uncovering information pertinent to the Section's mission. Current research that impacts achievement gap variables will continually be reviewed, explored, and shared with stakeholders. Appropriate research-based best practices will be incorporated into the technical assistance provided.
- (3) Awareness sessions on a variety of gap-related issues will be conducted to heighten and strengthen the knowledge base of all stakeholders. Awareness sessions will provide opportunities to share information as well as opportunities to interact with different audiences.
- (4) Information dissemination is important to all stakeholders. The Closing the Achievement Gap Section will gather and compile pertinent information. A Closing the Achievement Gap web site has been established and is presently functional. To visit the site, go to www.ncpublic schools.org and click on Closing the Achievement Gap. The web site allows opportunities for sharing and communicating information.
- (5) An **annual report** will be produced to highlight the status of minority and at-risk students across the state.

Student Accountability Standards

The Student Accountability Standards for grades 3, 5, and 8 and 12 (Exit Exam of Essential Skills) were adopted by the State Board of Education to ensure higher levels of achievement for all students. The standards, or gateways, will ensure that students are working at grade level in reading, writing, and mathematics before being promoted to the next grade. The standards went into effect for grade 5 students beginning in the 2000-01 school year. Because all students will be required to demonstrate they are ready for the next level of work before being promoted, the standards are expected to promote minority achievement.

In addition, minority students should benefit from the early identification and intervention that the Accountability Standards will require. The potential for improved achievement by minority students has already been demonstrated through increased scores on end-



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of-grade and end-of-course tests among minority student groups at those school systems that have already implemented student accountability standards. It is important to point out that student safeguards have been built into the standards in the form of multiple testing and a review process.

Improving Minority & At-Risk Student Achievement Conference

The first major effort in the state directed at closing the minority achievement gap was the initiation of the *Improving Minority & At-Risk Student Achievement Conference*. The annual conference was organized in 1997 in response to growing concerns by the state's parents, educators, and policy-makers regarding the lag in academic achievement and performance of minority students. The fifth annual conference took place March 26-28, 2001, with nearly three thousand of the state's educators, parents, and business and community representatives meeting in Greensboro, North Carolina. Specifically, the conference aimed to:

- Encourage local school districts to use disaggregated data to make decisions about improving schools and student performance for the purposes of narrowing and eventually closing the minority achievement gap.
- 2. Increase the capacity of schools, school districts, and communities to develop initiatives and strategies that increase academic achievement for all students.
- 3. Share strategies for implementation of Student Accountability Standards.
- 4. Increase the capacity of schools and school districts to develop focused intervention and personalized education plans for students who are performing below proficiency at the elementary, middle, and high school levels.
- 5. Share strategies for helping students to continue growth after reaching Level III performance.
- 6. Encourage the establishment of networks of schools and/or school districts to share best practices and resources to improve school and student performance.

Two guiding principles of the conference are especially noteworthy: (1) Conference activities are not *simply* events but on-going strategies aimed at eliminating the minority achievement gap; and (2) Best practices designed to close the gap *upwardly* with all students improving achievement are emphasized. The 2002 Conference is scheduled for April 8-10 in Greensboro, North Carolina.

Advisory Commission on Raising Achievement and Closing Gaps

The Advisory Commission on Raising Achievement and Closing Gaps was established to advise the State Board of Education, the State Superintendent, and local school systems on direction, approaches, and best practices for raising student achievement and closing achievement gaps. The Commission met for the first time in August 2000 and meets regularly during the year.



The initial work of the Commission has been to establish a work plan for data collection and analysis that will facilitate purposeful and engaging discussion. The Commission has identified five (5) areas as being related to low student achievement, and a study committee has been assigned for each area.

- 1. Classroom Teacher Preparation, Training and Support
- 2. The Role and Influence of Home and Community
- 3. The Influence of Related Legislation and Policy
- 4. The Underachieving Student and His/Her Condition for Learning
- 5. Student Participation and Exclusion

Each committee, under the leadership of its chairperson, will report findings to the full commission for review and/or inclusion in reports. The commission has made a progress report to the State Board of Education. A final report is expected to be made once the study committees have concluded their work.

Historically Minority Colleges and Universities Consortium (HMCUC)

The HMCUC is a partnership between twelve historically minority institutions of higher education and the North Carolina Department of Public Instruction. Eleven of these institutions are historically black (Barbara-Scotia College, Bennett College, Elizabeth City State University, Fayetteville State University, Johnson C. Smith University, Livingston College, North Carolina A & T State University, North Carolina Central University, St. Augustine's College, Shaw University, and Winston-Salem State University), while the other (Pembroke State University) serves a student population that is about 25 percent Native American. The Consortium received \$500,000 from the General Assembly to expand partnerships among public school systems, families, businesses, community-based organizations, and the faith community to identify resources and strategies for closing the achievement gap of minority students.

With North Carolina Central University serving as the lead institution for the Consortium and its projects, Closing the Gap Centers will be established on the campus of each of the 12-member institutions. Specifically, the Consortium will focus on identifying those factors that affect the education of minority students in grades K-12, especially the performance of these students on end-of-grade and end-of-course tests. Once factors have been identified, appropriate strategies and programs for addressing them will be developed and implemented.

National Task Force

One of the major initiatives at the national level was the formulation of the National Task Force on Minority High Achievement by the College Board in 1997. This Task Force, which consists of 34 renowned scholars, was charged with the responsibility of probing the achievement gaps and recommending strategies to increase the number of successful minority students. The task force is faced with the challenge of sorting through numerous factors that may possibly interact to cause the achievement gap.



Minority Student Achievement Network

Another national effort for closing the student achievement gap is the Minority Achievement Network. The Minority Student Achievement Network was established when a group of superintendents from relatively advantaged school districts became frustrated at their inability to close the achievement gap between White and minority students. In search of solutions, the superintendents met in New Orleans in February 1999 to discuss collaborative actions to close the achievement gap between White and minority students. The research-based Network set the following goals:

- Become involved in research and program development with higher education, educational organizations and foundation partners.
- Share individual staff and district successes and failures through regular communica tions, visitations and job-alike focus groups.
- Provide professional staff development opportunities for network districts.
- Serve as a national clearinghouse for and disseminate information about best practices that raise the achievement of minority students.

Network membership is currently limited to 14 districts in nine states: one district in California; four districts in Illinois; two districts in Massachusetts; one district in Michigan; one district in North Carolina (Chapel Hill-Carrboro City Schools); one district in New York; two districts in Ohio; one district in Virginia; and one district in Wisconsin.

The Network may elect to expand the network at a future date based on mutually agreed criteria.



The data in this report reveal some glaring disparities between the academic achievement

of White and Asian children and other minority children in North Carolina. Such disparities suggest that North Carolina's public education system may not be serving all students equally well. Yet, from a societal perspective, the futures of all of North Carolina's children are inextricably connected. Thus, it is imperative that all of the state's children receive a sound education. Since educational outcomes are highly correlated with life's chances and opportunities, educationally underserved students "have less opportunity to pursue well-paying professional careers and are much more likely to hold low-wage jobs that provide few chances for advancement" (The College Board, 1999, Page 1).

Epilogue

Former President Lyndon B. Johnson (1965), in his speech before the National Conference on Education Legislation, epitomized the importance of all students achieving well when he stated, "We just cannot afford the waste that comes from the neglect of a single child." In 1988, the Commission on Minority Participation in Education and American Life released the following provocative statement regarding the importance of eliminating gaps in education:

"In education, employment, income, health, longevity, and other basic measures of individual and social well-being, gaps persist--and in some cases are widening--between members of minority groups and the majority population. If these disparities are allowed to continue, the United States inevitably will suffer a compromised quality of life and a lower standard of living. Social conflict will intensify. Our ability to compete in world markets will decline, our domestic economy will falter, our national security will be endangered. In brief, we will find ourselves unable to fulfill the promise of the American dream."

More recently, Tom Vander Ark, Executive Director of Education for the Bill and Melinda Gates Foundation, in a speech at the 2001 N. C. State University Emerging Issues Forum, concluded that "Erasing the achievement gap is one of the most important issues facing society."

The various strategies outlined in this report for closing the minority achievement gap are designed to ensure that North Carolina's public school system provides every child the opportunity to realize the promise of the American dream. Many of these strategies have already been implemented, while others are pending.

These are challenging and exciting times for public education in North Carolina. In the 1990's, North Carolina was first in progress. In the first decade of the 2000's, North Carolina has set the ambitious goal to be First in America. To do this, the performance of all children must be accelerated and the minority achievement gap must be eliminated. This will be a formidable challenge, but it can be done!



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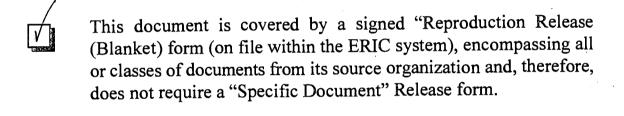
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